Environment Canada Environnement Canada

Sediment Data
Atlantic Provinces

Données sur les sédiments
Provinces de l'Atlantique

1990

INLAND WATERS DIRECTORATE
WATER RESOURCES BRANCH
WATER SURVEY OF CANADA
OTTAWA, CANADA, 1992

DIRECTION GÉNÉRALE DES EAUX INTÉRIEURES
DIRECTION DES RESSOURCES EN EAU
DIVISION DES RELEVÉS HYDROLOGIQUES DU CANADA
OTTAWA, CANADA, 1992

92-06862/

Printed on paper that contains recovered waste

Imprimé sur du papier à base de matériels récupérés

Published by authority of
the Minister of the Environment

Publié avec l'autorisation
du ministre de l'Environnement

©Minister of Supply and Services Canada 1992
Cat. No. En 36-410/1-1990
ISBN 0-662-58988-2

©Ministre des Approvisionnements et Services Canada 1992
N° de cat. En 36-410/1-1990
ISBN 0-662-58988-2

PREFACE

This publication was prepared by personnel of the Sediment Survey Section, Water Survey of Canada Division, under the direction of the Director, Water Resources Branch, Department of the Environment, Ottawa.

The basic data were collected and compiled under the supervision of the Regional Chief of the Water Resources Branch at Dartmouth, Nova Scotia.

The co-operation received from provincial agencies and from other organizations is gratefully acknowledged.

PRÉFACE

Le groupe d'étude des sédiments de la Division des relevés hydrologiques du Canada, sous l'autorité du directeur des Ressources en eau du ministère de l'Environnement, à Ottawa, a préparé la présente publication.

Le chef régional de la Direction des ressources en eau, à Dartmouth (Nouvelle-Écosse), a supervisé la collecte et la compilation des données de base.

Nous remercions vivement les organismes provinciaux, ou autres, pour leur collaboration.

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INTRODUCTION

The Water Resources Branch of the Department of the Environment herein presents for the 1990 calendar year the annual suspended sediment data and a historical data summary for the sediment survey investigations conducted in Newfoundland and Labrador, New Brunswick, Nova Scotia and Prince Edward Island by the Water Survey of Canada.

Data on the character and quantity of fluvial sediments provided by sediment survey investigations are intended for use in studies of water quality, environmental impacts, river processes and behaviour, and engineering design.

General introductory information on the sediment survey is included in this publication. Similar information for the associated hydrometric survey is given in the regular publications containing surface water data.

Details on individual stations and related records, as well as recent data that have not yet been published, may be obtained upon application to:

Regional Chief,
Water Resources Branch,
Department of the Environment,
5th Floor, Queen Square,
45 Alderney Drive,
Dartmouth, Nova Scotia.
B2Y 2N6
(902 426-5776)

or to the Director, Surveys and Information Systems Branch, Department of the Environment, Ottawa, Ontario, K1A 0H3 (819 997-2098).

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INTRODUCTION

Dans la présente publication de la Direction des ressources en eau du ministère de l'Environnement, on trouvera les données annuelles sur les sédiments en suspension pour 1990 et le sommaire des données chronologiques sur les sédiments, à la suite des études effectuées dans les cours d'eau de Terre-Neuve et du Labrador, du Nouveau-Brunswick, de la Nouvelle-Écosse et de l'Île-du-Prince-Édouard par la Division des relevés hydrologiques du Canada.

Les données recueillies sur la nature et l'importance de la charge solide dans les cours d'eau doivent servir aux études portant sur la qualité des eaux, les incidences environnementales, les processus fluviaux, le comportement des cours d'eau et la conception de projets.

La presente publication contient des renseignements généraux préliminaires sur les études des sédiments. Des renseignements semblables sur les études hydrométriques connexes sont contenus dans les publications régulières présentant des données sur les eaux de surface.

On peut obtenir des renseignements supplémentaires sur les stations et les relevés, ainsi que des données récentes non encore publiées, en s'adressant au:

Chef régional
Direction des ressources en eau
Ministère de l'Environnement
Édifice Queen Square, 5e étage
45, prom. Alderney
Dartmouth (Nouvelle-Écosse)
B2Y 2N6
(902 426-5776)

ou au Directeur, Relevés et systemes d'information, ministère de l'Environnement, Ottawa (Ontario), K1A 0H3 (819 997-2098).

SCOPE OF PUBLICATION

Descriptive information about sediment stations is given. This refers to the Location, Latitude and Longitude, Drainage Area and whether the flow is Natural Flow or Regulated Flow (the year that regulation began is given, if known), Type of Gauge and the Total Suspended Sediment Load in Tonnes for the Period of Record is also included. International Gauging Stations are identified and the names of co-operating agencies who supply data are given; unusual conditions at the sediment station that could affect the data results are explained under "Remarks".

This publication contains data on streamflow, instantaneous suspended sediment concentration; daily mean suspended sediment concentration; daily suspended sediment loads; dissolved solids concentration; load summary; particle-size distribution of suspended sediment in percent sand, silt and clay; bed load and bed material; water temperature when samples were collected; type of sampler and the single sampling vertical location.

A historical sediment data summary includes such information as Sampled Concentration Maximum and Minimum; Suspended Sediment Load Maximum Daily and the Total for Period. The Period of Record and the Type of Operation for each year of data are also given. A Summary for the Months of record gives the Period of Record Mean, the Mean for Period of Record and the Standard Error of Mean as a percent.

HISTORY AND OBJECTIVES OF SEDIMENT SURVEYS IN CANADA

In Canada, investigations of sediment transported by streams were first undertaken by individual organizations or agencies in 1948, to meet the needs of federal and provincial agencies for assessment of particular projects. Although the investigations were extended to meet expanding needs after 1948, it was not until 1961 that a systematic survey was undertaken by the Water Resources Branch.

The sediment survey program has the following objectives:

(1) Collection and provision of data related to sediment transport in Canadian rivers for applications in water resource engineering, water quality and environmental studies.

(2) Provision of information and advice related to sediment transport.

(3) Assessment, improvement and standardization of equipment and techniques used in Canada's sediment survey program.

PUBLICATION OF SEDIMENT DATA

Sediment data have been published in a variety of formats since the beginning of the Sediment Survey Program.

PORTÉE DE LA PUBLICATION

Des données descriptives sont présentées sur les stations d'étude des sédiments. Elles concernent leur emplacement, leurs latitude et longitude, leur bassin versant, la nature de débit (naturel ou régularisé, avec indication, le cas échéant, de l'année où la régularisation a commencé, si elle est connue), le type d'instrument de mesure employé et le débit total des sédiments en suspension (en tonnes) pour la période de relevé. Les stations internationales de jaugeage sont indiquées, ainsi que le nom des organismes qui fournissent les données. Des explications concernant des conditions exceptionnelles qui ont pu influer sur les résultats sont présentées dans la partie «Remarques».

Cette publication renferme des données sur le débit des cours d'eau, les concentrations instantanées de sédiments en suspension, les concentrations journalières moyennes de sédiments en suspension, les débits journaliers de sédiments en suspension, les concentrations de matières dissoutes, les débits solides totaux (résumés), la granulométrie des sédiments en suspension exprimée en pourcentage de sable, de limon et d'argile, le charriage et les matériaux du lit, la température de l'eau au moment de l'échantillonnage, le type d'échantillonneur employé et l'emplacement des verticales de prélèvement d'échantillons uniques.

Un résumé des données historiques sur les sédiments est inclus. On y trouve divers renseignements comme les concentrations maximale et minimale mesurées, le débit journalier maximal des sédiments en suspension et le total pour la période. La période de relevé et le type d'exploitation des stations sont indiqués pour chaque année. Dans un résumé pour les mois de relevé, on donne la moyenne pour chaque période et pour l'ensemble des périodes de relevé ainsi que l'erreur-type de la moyenne, en pourcentage.

HISTORIQUE ET OBJECTIFS DES ÉTUDES DES SÉDIMENTS AU CANADA

Au Canada, les études dans ce domaine ont débuté en 1948 en réponse aux besoins exprimés par certains organismes fédéraux et provinciaux pour l'évaluation de projets donnés et étaient le fait d'organismes privés. Bien que les études se soient poursuivies après 1948 pour satisfaire aux besoins accrus, ce n'est qu'en 1961 que la Direction des ressources en eau les a entreprises de façon systématique.

Les buts de ces études sont de:

(1) réunir et produire des données sur les transports solides dans les cours d'eau canadiens, données dont on peut avoir besoin pour des études concernant l'environnement, la qualité des eaux et la conception de projets portant sur les ressources en eau.

(2) produire des informations concernant les transports solides.

(3) évaluer, améliorer et uniformiser le matériel et les techniques employés dans le programme d'étude des sédiments au Canada.

PUBLICATION DES DONNÉES SUR LES SÉDIMENTS

Depuis le début du programme d'étude des sédiments, la présentation des données a varié.

During the years 1948 to 1960, some sediment data were collected for several Prairie rivers to meet the needs of particular projects. The first Water Resources Paper series containing sediment data incorporated a selection of these data and also data for part of the year ending September 30, 1961, at stations established for the continuing program. The second issue was a biennial publication covering only the continuing program for the 1962 and 1963 water years. All subsequent editions titled *Sediment Data Canadian Rivers* have been published annually. The sediment data since 1978 have been presented entirely in the International System of Units (SI).

Commencing with 1984, the *Sediment Data* were published in a new format wherein Canada was divided into eight regions. The provinces each represent a separate region except for New Brunswick, Newfoundland, Nova Scotia and Prince Edward Island, which together form the Atlantic Provinces region, and the Yukon and Northwest Territories which make up another. The publications are identified by the province or territories covered and the year in which the data were collected. These data are published annually on a calendar-year basis and the stations are listed alphabetically.

A new edition, *Miscellaneous Sediment Data 1966 to 1983*, was published. It contains a tabulation of locations in Canada where miscellaneous data were collected but not previously published by the Water Survey of Canada. The following data are included in this one time publication: date and time of sample collection; instantaneous discharge or daily mean discharge; sampling vertical; instantaneous concentration; dissolved solids for some samples; type of sampler used; particle size distribution of suspended sediment in percent sand, silt and clay for some depth integrated samples and/or measurements, and some point integrated measurements; particle size distribution of bed load; particle size distribution of bed material; and the water temperature at time of sampling for some samples is also given where available.

The first edition of a *Sediment Data Reference Index* was published for data to 1972. It contains a tabulation of locations in Canada where sediment data were collected by the Water Survey of Canada. The index has been subdivided alphabetically by province or territory, with sediment survey stations also listed alphabetically. Commencing with the 1978 publication, data are presented in the International System of Units (SI) and will continue to be published biennially. The latest edition supersedes all previous editions because it contains any corrections or additions since the last publication.

The first edition of a new publication series titled *Historical Sediment Data Summary for Canadian Rivers* was produced for data to 1974. This publication contains a summary of historical monthly and annual mean suspended sediment load, and annual extremes of daily suspended sediment concentration and loads and total annual suspended load. Commencing with the 1978 publication, data are presented entirely in the International System of Units (SI). This publication has been discontinued, as much of the information is now included in the new annual *Sediment Data* publication.

De 1948 à 1960, on a recueilli des données pour plusieurs cours d'eau des Prairies en prévision de la réalisation de certains projets. La première publication contenant des données sur les sédiments a paru dans la série intitulée *Water Resources Paper*; elle présentait un choix de ces données ainsi que des données recueillies en 1961 avant le 30 septembre à des stations établies pour la réalisation du programme permanent. La deuxième publication a porté sur les données recueillies dans le cadre du programme au cours des années hydrologiques 1962 et 1963. Par la suite, les données ont été publiées annuellement sous le titre *Données sur les sédiments - rivières canadiennes*. Depuis 1978, les données sont exprimées en unités du Système international (SI).

En 1984, la présentation des *Données sur les sédiments* a été modifiée. Le Canada a été divisé en huit régions, une région pour chaque province, sauf le Nouveau-Brunswick, Terre-Neuve, la Nouvelle-Écosse et l'Île-du-Prince-Édouard qui, ensemble, forment la région des provinces de l'Atlantique, et les Territoires du Yukon et du Nord-Ouest, qui forment une autre région. Les publications sont nommées selon la région couverte et l'année des données (année civile). Ces publications sont annuelles. Les stations y sont présentées par ordre alphabétique.

Une édition récente intitulée *Données diverses sur les sédiments, 1966 à 1983* vient de paraître. On y présente sous forme de tableau les emplacements où des données diverses non encore publiées ont été recueillies au Canada par la Division des relevés hydrologiques. Cette première édition comprend des données telles que : la date et la durée de l'échantillonnage; le débit instantané ou débit journalier moyen; la verticale d'échantillonnage; les concentrations instantanées; les concentrations de matières solides en solution pour certains échantillons; le type d'échantillonneur employé; la granulométrie des sédiments en suspension en pourcentage de sable, de limon et d'argile, dans le cas de mesures avec intégration selon la profondeur ou d'échantillons intégrés sur toute la profondeur, et dans le cas de mesures par la méthode ponctuelle; la granulométrie du charriage; la granulométrie des matériaux du lit; la température de l'eau lors du prélèvement d'échantillons, lorsque celle-ci est connue.

Un *Index de référence des données sur les sédiments* est publié. La première édition portait sur les données disponibles jusqu'en 1972. Les emplacements où des données sur les sédiments ont été recueillies au Canada par la Division des relevés hydrologiques y sont présentés sous forme de tableau. L'*Index* est subdivisé selon l'ordre alphabétique par province ou territoire, et les stations de mesure des sédiments sont classées par ordre alphabétique. À partir de 1978, les données sont exprimées en unités du Système international (SI). L'*Index* est publié tous les deux ans; l'édition la plus récente annule toutes les éditions antérieures, car elle renferme toutes les corrections et mises à jour effectuées depuis la dernière parution.

Une autre série de publications a porté le titre *Sommaire chronologique des données sur les sédiments de rivières canadiennes*. La première édition renfermait les données disponibles jusqu'en 1974. Cette série présentait un résumé donnant les moyennes mensuelles et annuelles historiques du débit des sédiments en suspension, les valeurs annuelles extrêmes de la concentration journalière et du débit journalier des sédiments en suspension et le débit annuel total des sédiments en suspension. À partir de 1978, les données ont été présentées en unités du Système international (SI). Cette série a été abandonnée, car une bonne partie de l'information est maintenant contenue dans la nouvelle publication annuelle intitulée *Données sur les sédiments*.

COLLECTION AND PROCESSING OF BASIC DATA

1. *Equipment and Instrumentation*

The sediment survey program of the Water Resources Branch is conducted in cross sections on rivers selected specifically for the sediment survey or for the hydrometric survey. Certain cross sections are located at traffic bridges, while others are equipped with cableways, or automatic pump samplers.

The following sediment samplers have been used in the sediment survey program:

(a) Depth-integrating suspended sediment wading-type hand sampler, USDH-48, used on small streams or during winter periods.

(b) Depth-integrating suspended sediment sampler, USDH-59, used as a handline suspension for small and medium size streams.

(c) Depth-integrating suspended sediment samplers, USD-49, and USD-74, used on a reel suspension for medium and large streams whose depths are less than five metres.

(d) Point-integrating suspended sediment samplers, USP-61, USP-61-A1, USP-63, and USP-72, used for point-integrating sampling, or depth-integrating sampling if the depth is over five metres, or in a cross section with velocities up to two metres per second.

(e) Automatic pump sampler is an automatic pumping system permitting unattended collecting and bottling of individual water samples pumped from a fixed point in a stream. This sampler is normally installed at isolated locations where otherwise no data would be available during ice break-up or peak periods.

(f) Bed material sampler, USBM-54, used on large or deep streams or on those streams with hard-packed streambeds.

(g) Bed material sampler, USBMH-60, used on some large or deep streams or on those streams with soft-packed streambeds.

(h) Bed material sampler, USBMH-53, used on some small or shallow streams.

(i) Lane bed material sampler, a drag-type sampler used on small streams or those with soft streambeds.

2. *Hydrometric Surveys*

The hydrometric survey includes the standard procedures for observations of water levels, streamflow measurements, water surface slope determinations if required, and observations of water temperature. The streamflow measurements are made in conjunction with the sediment load measurements and conform to the accepted standards of the regular hydrometric survey.

3. *Sediment Sampling Program*

The following is a summary of the elements associated with the Sediment Sampling Program:

(a) Periodic measurement of suspended sediment load by the

COLLECTE ET TRAITEMENT DES DONNÉES DE BASE

1. *Matériel*

L'étude des sédiments réalisée par la Direction des ressources en eau porte sur des sections transversales de cours d'eau choisis spécialement à cette fin ou pour les relevés hydrométriques. Certaines sections sont situées sous un pont, d'autres sont accessibles par téléphérique, ou sont étudiées à l'aide d'un échantillonneur sous pression.

On a utilisé les échantillonneurs suivants:

(a) L'échantillonneur intégrateur selon la profondeur, type simple, USDH-48, employé dans les cours d'eau peu profonds ou en hiver;

(b) L'échantillonneur intégrateur selon la profondeur USDH-59, utilisé comme une ligne dans les cours d'eau petits et moyens;

(c) Les échantillonneurs intégrateurs selon la profondeur USD-49 et USD-74 fixés au bout d'une corde s'enroulant autour d'un moulinet et employés dans les cours d'eau gros ou moyens dont la profondeur est inférieure à cinq mètres;

(d) Les échantillonneurs intégrateurs USP-61, USP-61-A1, USP-63 et USP-72, employés ponctuellement ou sur toute la verticale, et utilisés lorsque la profondeur est supérieure à cinq mètres ou dans les sections transversales qui connaissent un débit qui atteint 2 m/s.

(e) Un échantillonneur automatique permettant le prélèvement en bouteilles, sans surveillance, d'échantillons uniques d'eau obtenus à l'aide d'une pompe en un point précis d'un cours d'eau; il est ordinairement installé dans un endroit isolé où aucune donnée ne pourrait être obtenue autrement au cours de la débâcle ou des périodes de débit de pointe;

(f) L'échantillonneur USBM-54 employé pour le prélèvement d'échantillons des matériaux du lit dans les cours d'eau importants ou profonds ou dans les cours d'eau dont le fond est dur;

(g) L'échantillonneur USBMH-60 employé pour le prélèvement d'échantillons des matériaux du lit dans certains cours d'eau importants ou profonds, ou dans les cours d'eau dont le fond est meuble;

(h) L'échantillonneur USBMH-53 employé pour le prélèvement d'échantillons des matériaux du lit dans certains cours d'eau petits ou peu profonds;

(i) La drague employée pour le prélèvement d'échantillons des matériaux du lit dans de petits cours d'eau ou dans des cours d'eau dont le fond est meuble.

2. *Relevés hydrométriques*

Le relevé hydrométrique comprend, entre autres, l'observation de la hauteur des eaux, la mesure du débit de l'eau, la détermination de la pente de la ligne d'eau, si nécessaire, ainsi que l'observation de la température de l'eau. Les mesures du débit de l'eau et du débit des sédiments se font conjointement, suivant les méthodes acceptées.

3. *Échantillonnage des sédiments des cours d'eau*

L'échantillonnage comporte, en gros, les éléments suivants:

(a) La mesure périodique du débit des sédiments en suspension par la méthode d'intégration sur toute la profondeur

depth-integrating method for determining the average suspended sediment concentration in the cross section.

(b) Single suspended sediment samples at a selected vertical for determining the sediment concentration for the days when suspended sediment load measurements are not taken.

(c) Limited measurement of suspended sediment load by the point-integrating method for checking depth-integrated measurements and for determining particle-size distribution in the cross section.

(d) Sampling of bed material for determining particle-size distribution.

(e) Periodic measurement of bed load.

The following is a brief explanation of the elements listed above:

(a) *Suspended Sediment Load by Depth-Integrating Method*: Measurements are made by the depth-integrating method to determine the suspended sediment load in the entire cross section of a stream, the average suspended sediment concentration in the cross section, and the size distribution of the sediment particles. It is known that the concentration of suspended sediment tends to increase from the water surface to the streambed and could vary from streambank to streambank.

When making suspended sediment equal-discharge-increment (EDI) measurements, the stream cross section is divided into at least five equal-flow panels and a representative suspended sediment sample is collected from each portion. For each panel of the cross section, the suspended sediment load (r) may then be computed by multiplying the flow (q) by the suspended sediment concentration (c):

$$r = q\ c$$

The suspended sediment load (R) for the cross section may be computed by adding the sediment loads for the five equal-flow panels:

$$R = r\ n = q_1c_1 + q_2c_2 + \ldots + q_nc_n$$

The depth-integrating method of sampling is used to measure the suspended sediment concentration. This method is based on the premise that the sampler fills at a rate proportional to the velocity of the approaching flow, and that by traversing the depth of a stream at a uniform speed, the sampler will receive a portion of water sediment mixture at every point in the vertical.

(b) *Single Suspended Sediment Samples at a Selected Vertical*: Single suspended sediment samples, consisting of two bottles each, are collected routinely using the depth or point-integrating samplers at a permanently fixed vertical in a cross section. During periods of very heavy sediment concentration, two or three single sediment samples may be taken per day, while during periods of low concentration, one single sediment sample may only be taken every few days. During extremely low flow periods, the sampling may be limited to one single sample in several weeks or months.

(c) *Suspended Sediment Load by Point-Integrating Method*: A limited number of suspended sediment load measurements are made by the point-integrating method. These measurements are included in the program (a) to check by comparison the "measured" sediment loads obtained by the depth-integrating method with the suspended sediment loads by the point-integrating method and (b) to obtain samples from which to determine particle-size distribution

pour la détermination de la concentration moyenne dans une section transversale;

(b) Le prélèvement d'échantillons uniques des sédiments en suspension selon une verticale choisie, afin de déterminer la concentration des sédiments les journées où le débit des sédiments en suspension n'est pas mesuré;

(c) Un nombre restreint de mesures du débit des sédiments en suspension avec intégration en un point précis d'un cours d'eau, afin de vérifier les résultats des mesures avec intégration selon la profondeur et afin de déterminer la granulométrie des particules de sédiments dans une section transversale d'un cours d'eau;

(d) L'échantillonnage des matériaux du lit afin d'en déterminer la granulométrie;

(e) La mesure périodique du charriage.

Voici une brève description des éléments susmentionnés.

(a) *Mesure du débit des sédiments en suspension par intégration selon la profondeur*: La méthode permet de déterminer le débit des sédiments en suspension traversant toute une section transversale d'un cours d'eau, la concentration moyenne des sédiments en suspension dans la section transversale et la granulométrie des sédiments en suspension. C'est un fait connu que la concentration des sédiments en suspension augmente généralement avec la profondeur et qu'elle peut varier d'une rive à l'autre d'un cours d'eau.

Avec la méthode d'incréments de débits égaux (IDE), la mesure du débit des sédiments en suspension se fait en divisant une section transversale d'un cours d'eau en au moins cinq tranches où le débit est égal et en prélevant un échantillon représentatif dans chacune d'elles. Le débit des sédiments en suspension (r) pour chaque tranche se calcule en multipliant le débit (q) par la concentration des sédiments en suspension (c):

$$r = q\ c$$

Le débit des sédiments en suspension (R) pour la section transversale est la somme des débits des sédiments des cinq tranches:

$$R = r\ n = q_1c_1 + q_2c_2 + \ldots + q_nc_n$$

La méthode par intégration sur toute la profondeur est employée pour mesurer la concentration des sédiments en suspension. Elle suppose que l'échantillonneur se remplit à un rythme proportionnel au débit de l'eau et qu'en étant déplacé à une vitesse uniforme sur toute la verticale, il reçoit une partie du mélange eau-sédiments à tous les points de celle-ci.

(b) *Prélèvement d'échantillons uniques de sédiments en suspension sur une verticale choisie*: De tels échantillons, constitués chacun de deux bouteilles, sont prélevés régulièrement à l'aide d'appareils intégrateurs, selon la profondeur ou ponctuels, sur une verticale permanente d'une section transversale. Lorsque la concentration des sédiments est très forte, deux ou trois échantillonnages peuvent être effectués chaque jour, alors qu'un seul échantillon peut être prélevé à quelques jours d'intervalle lorsqu'elle est faible. Au cours des périodes où le débit est extrêmement faible, l'échantillonnage peut être limité à un échantillon toutes les quelques semaine ou tous les quelques mois.

(c) *Mesure du débit des sédiments en suspension par la méthode ponctuelle*: Un nombre limité de mesures du débit des sédiments en suspension sont faites avec cette méthode. On y a recours a) pour vérifier les valeurs du débit mesurées au moyen de la méthode précédente et b) pour obtenir des échantillons en vue de déterminer la granulométrie des sédiments en divers points de la

at different points in the cross section. The point-integrating sediment loads are computed by graphical methods.

The relationship between the suspended sediment concentration of the single vertical samples and the average concentration in the cross section determined from the suspended sediment load measurements is established for some stations. Using this relationship, the sediment concentrations of the single vertical samples are adjusted to reflect the average suspended sediment concentration in the cross section. These average sediment concentrations in the cross sections are plotted, and a smooth curve is drawn through the points to obtain a concentration graph. This graph represents the average suspended sediment concentration for the period of record. The daily mean concentrations are determined by automated procedures using a digitizer interfaced with a Digital minicomputer.

The daily suspended sediment loads are computed on the basis of stream discharges and the collected suspended sediment concentrations. The daily suspended sediment loads are expressed in tonnes per day and are obtained by multiplying the daily mean sediment concentration (mg/L), by the daily mean discharge (m^3/s), and the conversion factor, 0.0864.

(d) *Bed Material Sampling*: In a cross section, bed material samples are usually taken in the same sampling verticals as the suspended sediment samples. Often, additional bed material samples are collected at the water edge, the extreme water level or at other points in the cross section. The total number of bed material samples taken in a cross section usually varies between five and nine.

(e) *Bed Load Measurement*: There are several methods available for measurement of bed load (volumetric method, measurement by samplers, method of tracers, method of constricted cross section, study of sound waves, etc.). The measurement methods should be selected in accordance with river regime.

4. *Total Sediment Load*

Sediment transport may be divided into two categories: sediment maintained in suspension in the stream (suspended load), and sediment being carried along the streambed (bed load). To measure the total sediment load, each of these must be measured separately and then totalled. The total sediment load was not computed for this publication.

5. *Sediment Survey Laboratories*

The Water Resources Branch maintain sediment survey laboratories in New Westminster, British Columbia; Regina, Saskatchewan; Guelph, Ontario; and Moncton, New Brunswick. The laboratories are equipped to perform the following analyses:

(a) determination of sediment concentration by (1) filtration method, (2) evaporation method and (3) determination of total dissolved solids by evaporation method.
(b) particle-size distribution analysis by (1) bottom withdrawal tube method, (2) sieving and (3) hydrometer method.

Determination of the sediment concentration by the evaporation method is carried out by evaporating the water from the settled sediment sample, with the results being corrected for dissolved solids. The quantity of dissolved solids is determined by evaporating a portion of the decanted water of a sample. In the filtration method, the suspended sediment concentration of water samples is determined by utilizing Gooch crucibles with a Reeve Angel 934AH filter and a Millipore AP20 prefilter and a vacuum system.

section transversale. Cette méthode fait appel à des graphiques pour le calcul du débit des sédiments.

Le rapport entre la concentration des sédiments en suspension dans les échantillons prélevés sur une seule verticale et la concentration moyenne dans la section transversale, telle que déterminée à partir des mesures du débit des sédiments en suspension, est établi pour quelques stations. Il permet de corriger les concentrations mesurées à une seule verticale de manière à donner la concentration moyenne dans la section transversale. Les concentrations moyennes ainsi déterminées sont reportées sur un graphique, et une courbe lisse passant par les points marqués est tracée. Le graphique obtenu représente la concentration moyenne des sédiments en suspension pour la période de relevé. Les concentrations moyennes quotidiennes sont déterminées automatiquement à l'aide d'un convertisseur analogique-numérique relié à un mini-ordinateur numérique.

Les valeurs journalières du débit des sédiments en suspension sont calculées à partir du débit du cours d'eau et des concentrations des sédiments en suspension recueillis. Elles sont exprimées en tonnes par jour. On les détermine en multipliant la concentration moyenne journalière des sédiments (mg/L) par le débit moyen journalier (m^3/s) et par un facteur de conversion approprié, 0.0864.

(d) *Échantillonnage des matériaux du lit*: Dans une section transversale, les échantillons des matériaux du lit sont ordinairement prélevés aux mêmes verticales que ceux des sédiments en suspension. Souvent, des échantillons supplémentaires sont pris près des rives, là où le niveau d'eau est extrême et à d'autres points de la section transversale. Leur nombre total pour une section donnée varie ordinairement entre cinq et neuf.

(e) *Mesure du charriage*: La mesure peut se faire par plusieurs méthodes (méthode volumétrique, mesure à l'aide d'échantillonneurs, méthode des traceurs, méthode de la section transversale rétrécie, étude des ondes sonores, etc.). Le choix se fondera sur la nature du régime du cours d'eau.

4. *Débit solide total*

Il y a deux catégories de sédiments: les sédiments maintenus en suspension au sein de l'eau (sédiments en suspension), et les sédiments charriés sur le lit d'un cours d'eau (charriage de fond). Les deux types de sédiments doivent être mesurés séparément et leurs valeurs additionnées si on veut mesurer le débit total des sédiments. Toutefois, on ne l'a pas calculé aux fins de la présente publication.

5. *Laboratoires d'analyse*

La Direction des ressources en eau possède des laboratoires d'analyse des sédiments à New Westminster (Colombie-Britannique), Regina (Saskatchewan), Guelph (Ontario) et Moncton (Nouveau-Brunswick). Les laboratoires disposent des appareils nécessaires pour effectuer les analyses suivantes:

(a) la détermination de la concentration des sédiments par (1) filtration, (2) évaporation, et (3) détermination des matières dissoutes totales par évaporation.
(b) l'analyse granulométrique (1) par extraction des sédiments déposés dans un tube, (2) par l'emploi de tamis et (3) par l'utilisation d'un hydromètre.

La méthode par évaporation consiste à faire évaporer l'eau d'un échantillon de sédiments décanté et à corriger les résultats pour tenir compte des matières dissoutes. La quantité de celles-ci est déterminée en faisant évaporer une partie de l'eau de l'échantillon décanté. Dans la méthode par filtration, on utilise sous vide des creusets de Gooch munis d'un filtre Reeve Angel 934AH et d'un préfiltre Millipore AP20.

Particle-size analysis was carried out for some suspended sediment samples having gross weights in the range of 0.15 to 5 g using the Bottom Withdrawal Tube method. The particle-size distribution of the Bottom Withdrawal Tube method ranges from 0.002 to 1.000 mm. The Sieve analysis method may be used for samples with a large amount of material coarser than 0.062 mm.

The particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)
Clay	0.000 24 - 0.004
Silt	0.004 - 0.062
Sand	0.062 - 2.0
Gravel	2.0 - 64.0

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analyzed in distilled water. Chemical dispersion is not used for native-water analysis.

6. *Accuracy and Reliability of Field Data and Computed Results*

The overall accuracy and degree of reliability of the sediment data is dependent upon many factors. Some of the more important of these are:

(a) accuracy and reliability of streamflow records;
(b) regime of the river;
(c) type of sampling equipment used to collect the suspended sediment samples;
(d) frequency of suspended sediment discharge measurements;
(e) frequency of individual sampling;
(f) quality of the relationship between the average suspended sediment concentration in the cross section and the concentration of the individual samples;
(g) frequency and method of bed material sampling;
(h) frequency and method of bed load measurements;
(i) accuracy and reliability of the laboratory analysis;
(j) selected methods of computation of the suspended sediment discharge;
(k) interpretation and extrapolation of sediment records.

An assessment of the quality of the records can be made by an examination of the occurrence of the symbol (S) on the daily mean concentrations.

* In general, data collected during open-water periods are more reliable than those collected during periods of ice conditions or those records obtained by estimation. Further, water level data collected utilizing a water-stage recorder are more reliable and accurate than those using a manual gauge only, especially for small or flashy streams.

Une analyse granulométrique a été effectuée pour certains échantillons de sédiments en suspension ayant un poids brut dans l'intervalle de 0.15 à 5 g par la méthode de la burette (extraction des sédiments déposés, à divers intervalles). La distribution de la taille des particules déterminée par cette méthode varie de 0.002 à 1.000 mm. La méthode de tamisage peut être employée pour les échantillons ayant une forte quantité de particules de taille supérieure à 0.062 mm.

La classification granulométrique qui est utilisée dans la présente publication est conforme aux recommandations faites par l'*American Geophysical Union Subcommittee on Sediment Terminology*. La classification est la suivante:

Classification	Taille (mm)
Argile	0.000 24 - 0.004
Limon	0.004 - 0.062
Sable	0.062 - 2.0
Gravier	2.0 - 64.0

La répartition granulométrique qui est fournie dans cette publication, n'est pas obligatoirement représentative de toutes les particules qui sont transportées par un cours d'eau donné. La plupart des matières organiques sont extraites de l'échantillon qui est ensuite soumis à une dispersion mécanique et chimique avant d'être analysé dans de l'eau distillée. La dispersion chimique ne sert pas à l'analyse de l'eau naturelle.

6. *Exactitude des données et des résultats*

L'exactitude des données sur les sédiments dépend de nombreux facteurs. On peut citer, parmi les plus importants:

(a) l'exactitude des données sur les débits;
(b) le régime d'un cours d'eau;
(c) le type d'appareil d'échantillonnage utilisé pour prélever les échantillons de sédiments en suspension;
(d) la fréquence des mesures du débit des sédiments en suspension;
(e) la fréquence des échantillonnages isolés;
(f) la qualité du rapport entre la concentration moyenne des sédiments en suspension dans une section transversale et la concentration des échantillons isolés;
(g) la fréquence des échantillonnages des matériaux de fond et la méthode utilisée;
(h) la fréquence des mesures du charriage de fond et la méthode utilisée;
(i) l'exactitude des analyses de laboratoire;
(j) les méthodes de calcul du débit des sédiments en suspension;
(k) l'interprétation et l'extrapolation des données sur les sédiments.

La qualité des données peut être évaluée d'après la fréquence d'utilisation du symbole (S), avec les données sur la concentration journalière moyenne.

En général, les données recueillies au cours des périodes d'eau libre sont plus sûres que celles qui sont obtenues au cours des périodes de glaces ou par estimation. De plus, les données sur le niveau des eaux qui sont mesurées à l'aide d'un limnigraphe sont plus certaines et plus exactes que celles qui sont mesurées à l'aide d'une jauge manuelle seulement, surtout dans le cas des petits cours d'eau ou des cours d'eau à crues très rapides.

METHOD OF TABULATION OF SEDIMENT DATA

For stations where the suspended sediment load was obtained, the following data are given where available:

1. The table of *Suspended Sediment Load* includes the daily mean discharge in cubic metres per second, the daily mean concentration in milligrams per litre, and the daily suspended sediment load in tonnes per day. The total monthly discharge and total monthly sediment load are also given for each month of record.

   For stations where the sediment load in tonnes per day are produced for complete or partial years, the *Total Suspended Load* for the period is given in the descriptive information.

   For stations where only suspended sediment concentrations are obtained, the table of *Suspended Sediment Load* will not be given.

   Additional descriptive information about the sediment station is also given and will indicate the following, where applicable.

   Location – the latitude and longitude co-ordinates of the location of the gauge are given. For stations where the gauge is located an appreciable distance from the discharge measurement section, these co-ordinates give the location of the discharge measurement section.

   Drainage area – refers to that area enclosed by a topographic divide such that direct surface runoff from precipitation would drain by gravity into the stream upstream from the location of the station.

   Type of Flow – where the flow is known to be natural, this is indicated. The flow of water in many river systems is affected by upstream regulation. In some cases, the extent of this regulation is not known and therefore is not indicated. However, where the regulation is known to be "appreciable", this is indicated as well as the year that the regulation began, if known.

   Type of Gauge – refers to the installation or method used to obtain water level or discharge data:

   (a) Manual – a non-recording type of gauge from which observations of stage normally are obtained once daily.

   (b) Recording – a water-stage recorder from which continuous water levels are obtained on an analog chart. For most International Gauging Stations located in the United States, water level records are obtained utilizing a digital recorder.

   International Gauging Station – on waters adjacent to the international boundary, certain gauging stations have been

PRÉSENTATION DES TABLEAUX DE DONNÉES SUR LES SÉDIMENTS

Pour les stations de mesure du débit des sédiments en suspension, les données suivantes sont présentées, pour autant qu'elles sont disponibles:

1. Le tableau concernant le *débit des sédiments en suspension* (The table of Suspended Sediment Load) donne le débit journalier moyen de l'eau, en mètres cubes par seconde, la concentration journalière moyenne, en milligrammes par litre, et le débit journalier des sédiments en suspension, en tonnes par jour. Chaque mois les données indiquent également les débits mensuels totaux de l'eau et des sédiments.

   Dans le cas des stations où le débit des sédiments, en tonnes par jour, est fourni pour une année complète ou une partie de l'année, le total pour la période est indiqué.

   Dans le cas des stations où seule la concentration des sédiments en suspension est obtenue, ce tableau est absent.

   Des renseignements descriptifs additionnels au sujet de la station sont également présentées. On peut y apporter les précisions suivantes:

   Emplacement (Location) – La latitude et la longitude de la station de jaugeage sont indiquées. Dans les cas où l'équipement de mesure est situé à une bonne distance de la section où le jaugeage est effectué, on indique les coordonnées de cette section.

   Superficie du bassin versant (Drainage area) – Désigne la zone délimitée par une ligne de faîte de sorte que l'écoulement de surface direct provenant des précipitations est entraîné par gravité vers le cours d'eau, en amont de la station.

   Type de débit (Type of Flow) – Un débit reconnu comme naturel est indiqué. Le débit de nombreux réseaux hydrographiques est modifié par une régularisation effectuée en amont. Dans certains cas, l'importance de cette régularisation n'est pas connue, et elle n'est donc pas indiquée. Cependant, quand on sait que la régularisation est d'une certaine importance, on l'indique, ainsi que l'année où elle a débuté (si elle est connue).

   Type de jauge (Type of Gauge) – Il s'agit des jauges ou des méthodes de jaugeage utilisées pour obtenir les données sur le niveau ou le débit d'un cours d'eau.

   (a) *Manuel* (Manual) – Indique qu'un appareil non enregistreur est employé pour obtenir normalement une fois par jour les données sur le niveau et le débit du cours d'eau.
   (b) *Enregistreuse* (Recording) – Indique qu'un limnigraphe permet de mesurer de façon continue le niveau des eaux qui est tracé sur un graphique. La plupart des stations internationales de jaugeage des États-Unis obtiennent les données sur le niveau des eaux à l'aide d'un enregistreur numérique.

   Station internationale de jaugeage (International Gauging Station) – Dans les eaux contiguës aux frontières, on a

designated as "International" and records are approved jointly. Differences between figures published herein and corresponding figures in United States Water Supply Papers are due to variations in automated data processing techniques.

Contributed Data – if data were supplied in their entirety or partially by an outside agency, the name of this co-operating agency is given.

Remarks – contains a statement pertaining to the sediment sample collection.

2. The table of *Instantaneous Suspended Sediment Concentration* for depth-integrating samples includes the following: Date and Time of the sample collection; Water Temperature; Instantaneous Discharge at time of sampling, (if not available the daily mean discharge is given and indicated by a symbol); Single Sampling Vertical location; Dissolved Solids; Percent Sand, Silt and Clay; Type of Sampler used. The particle-size distribution in percent in millimetres and the percent Sand, Silt and Clay, is given where available.

The Single Sampling Vertical Location is defined by many symbols, which are as follows, where applicable:

DIGITS - 5, 14, 130, etc., is the distance in metres from the initial point
WERB - Water's Edge RIGHT Bank
WELB - Water's Edge LEFT Bank
1QRB - One-quarter the distance FROM the RIGHT Bank
3QRB - Three-quarters the distance FROM the RIGHT Bank
1QLB - One-quarter the distance FROM the LEFT Bank
3QLB - Three-quarters the distance FROM the LEFT Bank
MID - MID STREAM
MULT - Composite sediment measurement

For the suspended sediment measurements, the Date; Time; Water Temperature at time of sampling; Discharge computed for each sampling panel; Concentration; Sampling Vertical; Dissolved Solids; Percent Sand, Silt and Clay; Type of Sampler used; and the Particle-size distribution of the Sand, Silt and Clay, in percent is given where available.

3. The table of *Split Vertical Suspended Sediment* for depth-integrating samples includes the following: Date and Time of the sample collection; Water Temperature; Instantaneous Discharge at time of sampling, (if not available the daily mean discharge is given and indicated by a symbol); Sampling Vertical; Depth of Sample (giving the depth sampled from and the depth sampled to); Concentration of Sample, in milligrams per litre, Dissolved solids, in milligrams per litre; and the Particle-size distribution in percent in millimetres and the percent Sand, Silt and Clay are also given.

désigné certaines stations comme «internationales», et les données obtenues sont approuvées par les pays concernés. Les différences entre les chiffres publiés dans la présente publications et dans les *United States Water Supply Papers* sont dues à des variantes dans les techniques de traitement automatique des données.

Données fournies (Contributed Data) – Lorsqu'un organisme extérieur a fourni toutes les données ou une partie des données, son nom est indiqué.

Remarques (Remarks) – Renseignements au sujet du prélèvement des échantillons de sédiments.

2. Le tableau des *concentrations instantanées de sédiments en suspension* (The table of Instantaneous Suspended Sediment Concentration) pour les échantillons obtenus par intégration selon la profondeur comprend: la date et l'heure de prélèvement; la température de l'eau; son débit instantané au moment de l'échantillonnage (s'il n'est pas connu, le débit journalier moyen, avec symbole); l'emplacement de la verticale d'échantillonnage; la concentration des matières dissoutes; les pourcentages de sable, de limon et d'argile; le type d'échantillonneur employé; et la granulométrie du sable, du limon et de l'argile, en pourcentage en millimètres et le pourcentage des particules est donné lorsqu'il est disponible.

Le site vertical d'échantillonnage unique est défini par plusieurs symboles dont les suivants dans certains cas :

CHIFFRE - 5, 14, 130, etc., désigne la distance en mètres à partir du point initial
WERB - Bord de l'eau, rive DROITE
WELB - Bord de l'eau, rive GAUCHE
1QRB - Un quart de la distance À PARTIR de la rive DROITE
3QRB - Trois quarts de la distance À PARTIR de la rive DROITE
1QLB - Un quart de la distance À PARTIR de la rive GAUCHE
3QLB - Trois quarts de la distance À PARTIR de la rive GAUCHE
MID - MI-DÉBIT
MULT - Mesure des sédiments mixtes

Pour les mesures des sédiments en suspension, la date, l'heure, la température de l'eau au moment de l'échantillonnage, le débit calculé pour chaque tranche de la section d'échantillonnage, la concentration et la verticale d'échantillonnage, la concentration des matières dissoutes; les pourcentages de sable, de limon et d'argile; le type d'échantillonneur employé; et la granulométrie du sable, du limon et de l'argile, en pourcentage des particules est donnée lorsqu'elle est disponible.

3. Le tableau des *sédiments en suspension fractionnés pris à la verticale* (The Table of Split Vertical Suspended Sediment) pour les échantillons obtenus par intégration selon la profondeur comprend les éléments suivants : la date et l'heure de l'échantillonnage; la température de l'eau; le débit instantané au moment de l'échantillonnage (s'il n'est pas disponible, on donne le débit moyen quotidien et on l'indique par un symbole), la verticale d'échantillonnage; la profondeur (donner la profondeur à laquelle l'échantillon a été pris); et la profondeur à laquelle l'échantillon a été attributé la concentration des échantillons, en milligrammes par litre; la concentration des matières dissoutes, en milligrammes par litre; la distribution des sédiments de la taille de particules en pourcentage en millimètres; le pourcentage de sable, de limon et d'argile.

4. The table of *Point Integrating Particle-size of Suspended Sediment* includes the following: Date and Time of the sample collection; Water Temperature; Panel Discharge for each sampling vertical; Sampling Vertical; Depth of Sample; Concentration of Sample, in milligrams per litre; Dissolved Solids in milligrams per litre, and the Particle-size distribution in percent in millimetres and the percent Sand, Silt and Clay are also given.

5. The table of *Bed Load Particle-size* includes the following: Date and Time of the sample collection; Panel Discharge; Sampling Vertical and the Type of Sampler used in the collection of the sample and the Particle-size distribution, in percent in millimetres, for each sample of bed load collected.

6. The table of *Bed Material Particle-size* includes the following: Date and Time of the sample collection; Panel Discharge; Sampling Vertical and the Type of Sampler used in the collection of the sample and the Particle-size distribution, in percent in millimetres, for each sample of bed material collected.

7. The table of *Historical Sediment Data Summary* gives the following, for the period of record, where applicable.

   (a) Record Summary
   (b) Type of Sampling
   (c) Sampled Concentration, maximum and minimum
   (d) Suspended Sediment Load, maximum daily and the total, for the period, in tonnes
   (e) Summary, including mean load, the historical mean load and the standard error of the mean in percent.

(a) The *Record Summary* gives the months of record that data are available. If the complete month is on file the symbol (C) is shown, while partial months of data are indicated by the symbol (P). Months with no data on file are indicated by (-).

(b) The *Type of Sampling* indicates the type of sampling method used to collect the sediment samples during the period of operation. If the samples were collected by manual methods this is indicated by "MANUAL." If the samples were collected by a pump sampler or some other automatic method this is indicated by "AUTO." If both manual and automatic sampling methods were used this is indicated by "DUAL."

(c) The *Sampled Concentration* gives the maximum and minimum concentration, in milligrams per litre, and the date of collection for each year of record. The extreme recorded for the period of record is indicated by an asterisk (*). If more than one maximum or minimum, of the same value, occurred during the year only the date of the first occurrence is identified by the asterisk.

(d) The *Suspended Sediment Load* gives the maximum daily load, in tonnes, and the date of occurrence. The extreme recorded is indicated by an asterisk (*). The Total for the Period gives

4. Le tableau de la *granulométrie des échantillons ponctuels et intégrés des sédiments en suspension* (The table of Point Integrating Particle-size of Suspended Sediment) comprend: la date et l'heure de prélèvement de l'échantillon, la température de l'eau, le débit de la tranche de la section pour chaque verticale d'échantillonnage, la verticale d'échantillonnage, la profondeur de l'échantillon, la concentration des échantillons, en milligrammes par litre, la concentration des matières dissoutes, en milligrammes par litre, et granulométrie en millimètres et en pourcentage du sable, du limon et de l'argile.

5. Le tableau de la *granulométrie des sédiments charriés* (The table of Bed Load Particle-size) comprend: la date et l'heure de prélèvement de l'échantillon, le débit de la tranche de la section, la verticale d'échantillonnage et le type d'échantillonneur employé et le pourcentage en millimètres des particules pour chaque échantillon recueilli du charriage.

6. Le tableau de la *granulométrie des matériaux du lit* (The table of Bed Material Particle-size) comprend: la date et l'heure de prélèvement de l'échantillon, le débit de la tranche de la section, la verticale d'échantillonnage et le type d'échantillonneur employé et le pourcentage en millimètres des particules pour chaque échantillon recueilli.

7. Le tableau du *sommaire chronologique des données sur les sédiments* (The table of Historical Sediment Data Summary) donne, pour la période pour laquelle les données sont disponibles, les renseignements suivants lorsque de telles données existent:

   (a) Le sommaire du relevé
   (b) Le type d'échantillonnage
   (c) Les concentrations mesurées, maximum et minimum
   (d) Le débit des sédiments en suspension, maximum quotidien et le total pour la période en tonnes
   (e) Résumé, comprend le débit moyen, le débit moyen chronologique et l'erreur type de la moyenne en pourcentage.

(a) Le *sommaire du relevé* donne les mois de relevé pour lesquels les données sont disponibles. Le symbole (C) indique que les données sont disponibles pour tout le mois. Le symbole (P) indique que ces données ne sont disponibles que pour une partie du mois. Enfin, on indique par (-) les mois qui n'ont pas de données.

(b) Le *type d'échantillonnage* indique le type de méthode d'échantillonnage que l'on utilise dans le prélèvement des échantillons de sédiments pendant la période d'exploitation. Si le prélèvement des échantillons se fait par des méthodes manuelles, on indique «MANUEL». Si le prélèvement des échantillons se fait au moyen d'échantillonneur à pompe ou par quelque autre méthode automatique, on indique «AUTO». Si on utilise à la fois des méthodes d'échantillonnage manuelles et automatiques, on indique «DOUBLE».

(c) Pour les *concentrations mesurées* (Sampled Concentration), on donne la concentration maximale et la concentration minimale, en milligrammes par litre, et leur date d'obtention pour chaque année de relevé. La valeur extrême enregistrée est indiquée par un astérisque (*). Si la valeur du maximum ou du minimum a été mesurée plus d'une fois pendant l'année, on signale, par l'astérisque, seulement la date de la première mesure.

(d) Sous le *débit des sédiments en suspension* (Suspended Sediment Load), on donne le débit journalier maximal, en tonnes, et sa date de mesure. Le débit extrême enregistré est indiqué

the total load for the period or year, in tonnes. The extreme recorded is also indicated by an asterisk (*). If more than one maximum or minimum, of the same value, occurred during the year only the date of the first occurrence is identified by the asterisk. A load which has been revised since the previous publication is marked with the symbol (R) for Revision.

(e) The *Summary* gives the *Mean Load* and the *Historical Mean Load* in tonnes.

The *Standard Error of the Mean* % is calculated using the following equations:

$$SEM = \frac{S}{\bar{x}\sqrt{n}} \times 100\%$$

and

$$S = \sqrt{\frac{\Sigma (x - \bar{x})^2}{n - 1}}$$

where SEM is the Standard Error of the Mean.

- S is the Standard Deviation of the annual mean loads.
- x is the annual Mean Load variable.
- $\bar{x}$ is the Historical Mean Load or the arithmetic mean of the annual Mean Loads.
- n is the number of years for which there is an annual Mean Load.

For stations with only instantaneous samples, this table will not include the *Suspended Sediment Load* or the statistical information in the *Summary*.

DEFINITION OF TERMS

The following definitions are given to clarify the terms used in this publication:

Automatic pump sample is an individual water-sediment mixture pumped from a fixed point in a stream.

Bed load is that material moving in almost continuous contact with the streambed, being rolled or pushed along the bottom by the force of the water.

Bed material is the sediment mixture of which the streambed is composed.

Daily load is the suspended sediment load expressed in tonnes for a particular day. The daily load is obtained by multiplying the daily mean sediment concentration (mg/L) by the daily mean discharge (m^3/s) and the conversion factor, 0.0864.

Daily mean concentration is a time-weighted mean value and is computed from a manually constructed concentration curve. The mean concentration value may be determined arithmetically or graphically. The arithmetic mean is obtained either by (1) selecting values from the concentration graph that represents uniform intervals of time and taking the arithmetic average or by (2) selecting values from the graph that represent unequal intervals of time and weighing these values by the

par un astérisque (*). Le débit total pour la période ou pour l'année est indiqué. La valeur extrême est également signalée par un astérisque (*). Si la valeur du maximum ou du minimum a été mesurée plus d'une fois pendant l'année, on signale, par l'astérisque, seulement la date de la première mesure. La lettre R indique qu'une valeur du débit a été révisée depuis la dernière publication.

(e) Le *résumé* donne le *débit moyen* et le *débit moyen chronologique*, en tonnes.

L'*erreur-type de la moyenne* % (Standard Error of the Mean), est calculée à l'aide des équations suivantes:

$$SEM = \frac{S}{\bar{x}\sqrt{n}} \times 100\%$$

et

$$S = \sqrt{\frac{\Sigma (x - \bar{x})^2}{n - 1}}$$

où SEM est l'erreur type de la moyenne.

- S est l'écart type des débits moyens annuels.
- x est la variable du débit moyen annuel.
- $\bar{x}$ est le débit moyen chronologique ou la moyenne arithmétique des débits moyens annuels.
- n est le nombre d'années où il y a un débit moyen annuel.

Dans le cas des stations ne prélevant que des échantillons instantanés, ce tableau ne donnera pas le *débit des sédiments en suspension* ni les données statistiques du *résumé*.

DÉFINITION DES TERMES

Les définitions suivantes sont présentées afin de faciliter la compréhension des termes utilisés dans la présente publication:

Échantillonnage automatique à l'aide d'une pompe (Automatic pump sample): Prélèvement d'un mélange de sédiments et d'eau au moyen d'une pompe fonctionnant automatiquement, en un point précis d'un cours d'eau.

Charriage (Bed load): Matières roulées ou poussées sur le fond sous l'action de l'eau, mais restant en contact presque permanent avec le fond.

Matériau du lit (Bed material): Mélange de sédiments composant le lit d'un cours d'eau.

Débit journalier des sédiments en suspension (Daily load): Débit des sédiments en suspension exprimé en tonnes par jour, pour une journée donnée. On l'obtient en multipliant la concentration journalière moyenne des sédiments (mg/L) par le débit journalier moyen de l'eau (m^3/s) et le facteur de conversion 0.0864.

Concentration journalière moyenne (Daily mean concentration): Moyenne pondérée en fonction du temps, calculée à partir d'une courbe de la concentration établie manuellement. La valeur de la concentration moyenne peut être déterminée arithmétiquement ou graphiquement. Pour la déterminer arithmétiquement, on peut, soit choisir sur la courbe des valeurs représentant des intervalles uniformes de temps et faire la moyenne arithmétique, soit choisir sur cette courbe

time intervals represented by the concentrations. For graphical explanation refer to *Office Procedures for Sediment Data Computations* and for the automated graphical explanation refer to *Automated Hydrometric Computation Procedures*.

Depth-integrated sediment sample is a suspended sediment sample collected at a single vertical in a cross section in a sampler moving vertically at a constant transit rate and represents an average sample for that part of the depth ranging from the water surface to about nine centimetres above the streambed.

Instantaneous suspended sediment sample is a sample collected at a fixed vertical in a river cross section.

Measured suspended sediment discharge is the suspended sediment discharge that can be computed from stream discharge and the concentration of sediment determined from depth-integrated sediment samples.

Particle-size analysis is the process of determining the size distribution of particles in a sediment sample.

Point-integrated sediment sample is a sample of the water-sediment mixture taken over a specified period of time at a fixed point and depth in a river cross section.

Sediment is fragmental material which has been deposited, eroded or transported by a flowing stream.

Sediment hydrograph is a graph showing the variation of suspended sediment concentration or sediment discharge with respect to time.

Single sample is a sample taken at a selected permanent vertical in a cross section. Two bottles of water-sediment mixture make up each single sample.

Single sampling vertical is a selected permanent vertical in a cross section in which single suspended sediment samples are collected.

Suspended sediment is sediment that moves in suspension in water either as a colloid or through the influence of the upward component of turbulent currents.

Suspended sediment concentration is the ratio of the weight of dry solids in a water-sediment mixture to the volume of the mixture. The units of this ratio are "milligrams per litre" (mg/L).

Suspended sediment load is the quantity of suspended sediment transported through a cross section per unit of time.

des valeurs qui représentent des intervalles inégaux de temps et pondérer ces valeurs en fonction des intervalles de temps correspondants. En ce qui concerne les méthodes graphiques, consulter *Méthodes de bureau pour les calculs de données sur les sédiments* et, pour la méthode automatisée, *Automated Hydrometric Computation Procedures*.

Échantillon intégré sur toute la profondeur (Depth integrated sediment sample): Échantillon des sédiments en suspension prélevé sur une verticale précise d'une section transversale d'un cours d'eau à l'aide d'un échantillonneur se déplaçant verticalement à une vitesse constante; il représente un échantillon moyen des matières en suspension entre la surface de l'eau et environ 9 cm du fond.

Échantillon instantané de sédiments en suspension (Instantaneous suspended sediment sample): Échantillon prélevé à une verticale précise d'une section transversale d'un cours d'eau.

Débit mesuré des sédiments en suspension (Measured suspended sediment discharge): Débit des sédiments en suspension qui peut être calculé à partir du débit du cours d'eau et de la concentration des sédiments déterminée à partir d'échantillons intégrés sur toute la profondeur.

Analyse granulométrique (Particle-size analysis): Détermination de la répartition de la taille des particules dans un échantillon de sédiments.

Échantillon ponctuel et intégré (Point-integrated sediment sample): Échantillon constitué d'un mélange d'eau et de sédiments, prélevé au cours d'une période de temps donnée en un point précis d'une section transversale d'un cours d'eau et à une profondeur donnée.

Sédiments (Sediment): Matières fragmentaires qui ont été déposées, érodées ou transportées par un cours d'eau.

Hydrogramme des sédiments (Sediment hydrograph): Graphique représentant la variation de la concentration des sédiments en suspension ou du débit des sédiments en fonction du temps.

Échantillon unique (Single sample): Échantillon prélevé sur une verticale permanente particulière dans une section transversale. Deux bouteilles du mélange eau-sédiments constituent un seul échantillon.

Verticale d'échantillonnage unique (Single sampling vertical): Verticale permanente d'une section transversale où des échantillons uniques de sédiments en suspension sont prélevés.

Sédiments en suspension (Suspended sediment): Matériaux qui se déplacent au sein de l'eau, soit sous forme colloïdale, soit sous l'influence des forces ascendantes des courants turbulents.

Concentration des sédiments en suspension (Suspended sediment concentration): Rapport entre le poids des matières solides sèches contenues dans un mélange eau-sédiments et le volume du mélange. Les unités employées sont les «milligrammes par litre» (mg/L).

Débit des sédiments en suspension (Suspended sediment load): Quantité de sédiments en suspension transportés par unité de temps à travers une section transversale d'un cours d'eau.

Total sediment load is the sum of the suspended sediment load and the bed load.

Unmeasured sediment load is the difference between total sediment load and measured suspended sediment load.

DEFINITION OF SYMBOLS

Symbols are located at the bottom of the data sets under the headings Time, Discharge, Concentration, and Dissolved Solids. The symbols with their definitions are listed below.

Time Symbol

E – *Estimated* – indicates estimated data. It indicates that the time of sample collection is estimated by some indirect method or comparison with other stream data.

Discharge Symbol(s)

A – *Manual Gauge* – indicates that one or more manual gauge observations per day were obtained and used as the mean for the day for a gauging station equipped with a recording gauge. This symbol is used during open-water periods only.

B – *Ice Conditions* – indicates the presence of ice at the gauging station. For gauging stations where discharge data are obtained, this symbol indicates that the presence of ice has affected the stage-discharge relationship.

E – *Estimated* – indicates estimated data. It indicates that the values recorded are estimated by some indirect method such as interpolation, extrapolation, comparison with other streams or by comparison with meteorological data.

H – *Daily Mean Discharge* – is the mean discharge for a particular day, usually referred to as the "daily mean discharge".

V – *Daily Mean; Manual Gauge* – is the mean discharge for a particular day and indicates that one or more manual gauge observations per day were obtained and used as the mean for the day.

W – *Daily Mean; Ice Conditions* – is the mean discharge for a particular day and indicates that the presence of ice has affected the stage-discharge relationship.

Y – *Daily Mean; Estimated* – is the mean discharge for a particular day and indicates that the value has been estimated by some indirect method.

Concentration Symbol(s)

C – *Coarse Material Present* – indicates that during the laboratory analysis coarse material (sand) was observed in the sediment sample.

Débit total des sédiments (Total sediment load): Somme du débit des sédiments en suspension et du débit charrié.

Débit non mesuré des sédiments (Unmeasured sediment load): Différence entre le débit total des sédiments et le débit mesuré des sédiments en suspension.

DÉFINITION DES SYMBOLES

Les symboles figurent au bas des séries de données et sont traités sous les rubriques Temps, Débit, Concentration, Matières solides en solution. Ces symboles avec leurs définitions sont donnés dans la liste ci-après.

Symbole du temps :

E – *Estimative* – Indique des données estimatives, c'est-à-dire que l'heure de prélèvement de l'échantillon est évaluée de façon indirecte ou par comparaison avec d'autres données sur les cours d'eau.

Symbole(s) du débit :

A – *Turbidisonde simple* – Indique qu'on a effectué à une station de jaugeage dotée d'une turbidisonde enregistreuse au moins une observation par jour à l'aide d'une turbidisonde simple et qu'on s'en est servi comme moyenne pour la journée en question. Le symbole n'est employé qu'au cours des périodes d'eau libre.

B – *Glaces* – Indique la présence de glaces à la station de jaugeage, qui ont faussé la relation hauteur-débit.

E – *Estimative* – Indique des données estimatives, c'est-à-dire que les valeurs enregistrées sont évaluées de façon indirecte, par exemple par interpolation, extrapolation, ou par comparaison avec d'autres cours d'eau ou avec des données météorologiques.

H – *Débit journalier moyen* – Débit moyen pour une journée donnée, ordinairement appelé «débit journalier moyen».

V – *Débit journalier moyen; turbidisonde simple* – Débit moyen pour une journée donnée; indique qu'on a effectué au moins une observation par jour et qu'on s'en est servi comme moyenne pour la journée en question.

W – *Débit journalier moyen; glaces* – Débit moyen pour une journée donnée; indique que la présence de glaces a faussé la relation hauteur-débit.

Y – *Débit journalier moyen; estimative* – Débit moyen pour une journée donnée; indique que la valeur a été évaluée de façon indirecte.

Symbole(s) de la concentration :

C – *Sable grossier présent* – Indique qu'au cours de l'analyse en laboratoire on a observé du sable grossier dans un échantillon de sédiments.

F – Sample Bottle Filled – indicates that during the laboratory analysis it was observed that the sample bottle had been filled to capacity.

G – Organic Material Present – indicates that during the laboratory analysis it was observed that organic material was collected in the sample bottle.

Single Vertical Symbol(s)

K – Sampling vertical not at the regular single vertical from LEFT bank – indicates that a sample was collected at a location from the left bank, in a cross-section, which is not at the regular single vertical.

L – Sediment measurement vertical not at the regular measurement cross-section from LEFT bank – indicates that the measurement sampling verticals were established from the left bank, in a cross-section which is not the regular measurement cross-section.

M – Sediment measurement vertical – indicates that the sampling vertical is one of several, usually five, and represents a panel width. The instantaneous discharge represents the flow for a panel width.

X – Sampling vertical not at the regular single vertical – indicates that a sample was collected at a location, in a cross-section, which is not at the regular single vertical. The location of the regular single vertical is given at the bottom of the Instantaneous Suspended Sediment data.

Z – Sediment measurement vertical not at the regular measurement cross-section – indicates that a suspended sediment measurement was collected in a cross-section which is not the regular measurement corss-section.

Note: If no symbol is present the samples have then been collected at the regular Single Vertical.

F – Flacon d'échantillonnage rempli – Indique qu'au cours de l'analyse en laboratoire on a observé que le flacon d'échantillonnage avait été complètement rempli.

G – Substance organique présente – Indique qu'au cours de l'analyse en laboratoire on a observé qu'une substance organique a été prélevée dans le flacon d'échantillonnage.

Symbole(s) de la verticale unique :

K – Verticale d'échantillonnage à l'extérieur de la verticale unique habituelle à partir de la rive GAUCHE – Indique qu'un échantillon a été prélevé à un endroit à partir de la rive gauche, dans une section transversale, mais à l'extérieur de la verticale unique habituelle.

L – Verticale de mesure des sédiments, à l'extérieur de la section transversale de mesure habituelle à partir de la rive GAUCHE – Indique que les verticales de mesure d'échantillonnage ont été établies à partir de la rive gauche, dans un section transversale à l'extérieur de la section transversale de mesure habituelle.

M – Verticale de mesure des sédiments – Indique que la verticale d'échantillonnage est l'une de plusieurs verticales, en général cinq, et qu'elle représente la dimension d'une tranche. Le débit instantané représente le débit relatif à la dimension d'une tranche.

X – Verticale d'échantillonnage à l'extérieur de la verticale unique habituelle – Indique qu'un échantillon a été prélevé à un endroit, dans une section transversale, mais à l'extérieur de la verticale unique habituelle. L'endroit de la verticale unique habituelle est donné à la fin des données sur les sédiments en suspension instantanés.

Z – Verticale de mesure des sédiments, à l'extérieur de la section transversale de mesure habituelle – Indique qu'une mesure de sédiments en suspension a été prise dans une section transversale à l'extérieur de la section transversale de mesure habituelle.

Note : S'il n'y a pas de symbole, cela indique que les échantillons ont été prélevés à la verticale unique habituelle.

EQUIVALENTS OF MEASURE

The following list of convenient equivalents of measure includes the relationship between imperial units and the International System of Units (SI).

1 inch equals 2.54 cm (centimetres)
1 foot equals 0.3048 m (metre)
1 statute mile equals 1.6093 km (kilometres)

1 cm (centimetre) equals 0.393 70 inch
1 m (metre) equals 3.2808 feet
1 km (kilometre) equals 0.621 37 mile

1 acre equals 43 560 square feet
1 acre equals 0.404 69 ha (hectare)
1 square mile equals 640 acres
1 square mile equals 2.5900 km^2 (square kilometres)
1 square mile equals 259.0 ha (hectares)

1 ha (hectare) equals 10 000 m^2 (square metres)
1 ha (hectare) equals 2.4710 acres
1 km^2 (square kilometre) equals 0.386 10 square mile

1 cubic foot equals 6.2288 imperial gallons
1 imperial gallon equals 4.546 09 L (litres)
1 imperial gallon equals 1.2010 U.S. gallons
1 U.S. gallon equals 0.133 68 cubic foot
1 cubic foot equals 0.028 317 m^3 (cubic metre)
1 m^3 (cubic metre) equals 35.315 cubic feet
1 dam^3 (cubic decametre) equals 1000 m^3 (cubic metres)
1 dam^3 (cubic decametre) equals 1 mm (millimetre) over 1 km^2 (square kilometre)

1 cubic foot per second for one day equals 1.9835 acre-feet
1 cubic foot per second for one day covers one square mile to a depth of 0.037 19 inch
1 acre-foot equals 1.2335 dam^3 (cubic decametres)
1 m^3/s (cubic metre per second) for one day equals 86.4 dam^3 (cubic decametre)
1 m^3/s (cubic metre per second) for one day covers one square kilometre to a depth of 0.0864 m (metre)

1 foot per second equals 0.6818 mile per hour
1 mile per hour equals 1.467 feet per second
1 m/s (metre per second) equals 3.6 km/h (kilometre per hour)
1 km/h (kilometre per hour) equals 0.2778 m/s (metre per second)

1 cubic foot per second equals 0.028 317 m^3/s (cubic metre per second)
1 m^3/s (cubic metre per second) equals 35.315 cubic feet per second

1 pound equals 0.453 59 kg (kilogram)
1 kg (kilogram) equals 2.2046 pounds

1 short ton (2000 pounds) equals 0.907 18 t (tonne)
1 t (tonne) equals 2204.6 pounds

degrees Celsius = 5/9 (degrees Fahrenheit - 32)
degrees Fahrenheit = 9/5 (degrees Celsius) + 32

ÉQUIVALENCES DES UNITÉS DE MESURE

Voici une liste des unités de mesure impériales et leurs équivalences dans le Système international d'unités (SI).

1 pouce vaut 2.54 cm (centimètres)
1 pied vaut 0.3048 m (mètre)
1 mille terrestre vaut 1.6093 km (kilomètre)

1 cm (centimètre) vaut 0.393 70 pouce
1 m (mètre) vaut 3.2808 pieds
1 km (kilomètre) vaut 0.621 37 mille

1 acre vaut 43 560 pieds carrés
1 acre vaut 0.404 69 ha (hectare)
1 mille carré vaut 640 acres
1 mille carré vaut 2.5900 km^2 (kilomètres carrés)
1 mille carré vaut 259.0 ha (hectares)

1 ha (hectare) vaut 10 000 m^2 (mètres carrés)
1 ha (hectare) vaut 2.4710 acres
1 km^2 (kilomètre carré) vaut 0.386 10 mille carré

1 pied cube vaut 6.2288 gallons impérials
1 gallon impérial vaut 4.546 09 L (litres)
1 gallon impérial vaut 1.2010 gallon américain
1 gallon américain vaut 0.133 68 pied cube
1 pied cube vaut 0.028 317 m^3 (mètre cube)
1 m^3 (mètre cube) vaut 35.315 pieds cubes
1 dam^3 (décamètre cube) vaut 1000 m^3 (mètres cubes)
1 dam^3 (décamètre cube) vaut 1 mm (millimètre) qui couvre 1 km^2 (kilomètre carré)

1 pied cube par seconde pendant un jour vaut 1.9835 acre-pied
1 pied cube par seconde pendant un jour couvre un volume d'un mille carré par 0.037 19 pouce
1 acre-pied vaut 1.2335 dam^3 (décamètre cube)
1 m^3/s (mètre cube par seconde) pour un jour vaut 86.4 dam^3 (décamètres cubes)
1 m^3/s (mètre cube par seconde) pour un jour couvre un kilomètre carré à une profondeur de 0.0864 m (mètre)

1 pied par seconde vaut 0.6818 mille par heure
1 mille par heure vaut 1.467 pied par seconde
1 m/s (mètre par seconde) vaut 3.6 km/h (kilomètres par heure)
1 km/h (kilomètre par heure) vaut 0.2778 m/s (mètre par seconde)

1 pied cube par seconde vaut 0.028 317 m^3/s (mètre cube par seconde)
1 m^3/s (mètre cube par seconde) vaut 35.315 pieds cubes par seconde

1 livre vaut 0.453 59 kg (kilogramme)
1 kg (kilogramme) vaut 2.2046 livres

1 tonne courte (2000 livres) vaut 0.907 18 t (tonne)
1 t (tonne) vaut 2204.6 livres

degrés Celsius = 5/9 (degrés Fahrenheit - 32)
degrés Fahrenheit = 9/5 (degrés Celsius) + 32

CO-OPERATION AND ACKNOWLEDGMENTS

Co-operative undertakings with other agencies form an important part of the activities of the Water Survey of Canada. Close co-operation has been maintained with public agencies and private organizations concerned with water resources. Data have been mutually exchanged and suspended sediment collection operations have been facilitated by the assistance received from a number of organizations.

On waters adjacent to the International Boundary, certain sediment stations are maintained by Canada (or the United States) under agreement with the United States (or Canada) and the records are collected and compiled in a manner equally acceptable to both countries. These stations are designated as "International Gauging Stations" in this publication.

For the valuable assistance and co-operation received in obtaining sediment survey records, the Water Survey of Canada is indebted to other federal and provincial organizations which are noted as contributing agencies in the summary for the year. A list of these agencies may be found in the *Sediment Data Reference Index*.

REVISIONS

A number of corrections or revisions have been made to previously published data. Many of these were required because of typographical or computational errors which were exposed when the data were stored on magnetic tape and monthly means were re-calculated by computer. Other errors were discovered or different interpretations of basic data were made during the systematic review of historical streamflow data.

Revisions to daily discharges or sediment data are not published at present. However, those stations where a systematic review has been conducted are identified in the Surface Water Data Reference Index publication. The Historical Streamflow Summary publications contain revisions to monthly and annual mean discharges, and annual extremes of discharge. Revisions, corrections or additions made to discharges and sediment after January 1, 1980, are indicated by an "R" symbol in the data summaries. Detailed information on revisions to historical data is available from the appropriate Regional Chief.

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RÉVISIONS

On a corrigé ou révisé des données déjà publiées. Il a été nécessaire d'effectuer plusieurs corrections, car on a relevé des erreurs typographiques ou de calcul lorsqu'on a enregistré les données sur rubans magnétiques et qu'on a recalculé les moyennes mensuelles à l'aide d'un ordinateur. On a aussi relevé d'autres erreurs ou fait des interprétations différentes de certaines données de base au cours de la révision systématique des données historiques sur le débit.

Les corrections apportées aux débits journaliers ou aux données sur les sédiments ne sont pas publiées, du moins pour le moment. Cependant, les stations où on a effectué une révision systématique sont indiquées dans l'*Index de référence des données sur les eaux de surface*. Les publications intitulées *Sommaire chronologique de l'écoulement* contiennent des données révisées sur les débits mensuels et annuels moyens et les extrêmes annuels du débit. Les révisions, corrections ou ajouts apportés aux données sur les débits et sur les sédiments après le 1er janvier 1980 sont indiqués par la lettre R dans les résumés des données. On peut obtenir plus de détails sur les révisions en s'adressant au chef régional concerné.

CHURCHILL RIVER ABOVE UPPER MUSKRAT FALLS - STATION NO. 03OE001

LOCATION: LAT 53 14 52 N LONG 060 47 21 W
DRAINAGE AREA: 92 500 km²
TYPE OF FLOW: REGULATED SINCE 1971
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1967	------P-----	MANUAL	24 JUL 26 *	24 JUL 26 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

NEWFOUNDLAND

HARRYS RIVER BELOW HIGHWAY BRIDGE - STATION NO. 02YJ001

SUSPENDED SEDIMENT FOR 1990

LOCATION: LAT 48 34 31 N LONG 058 21 48 W
DRAINAGE AREA: 640 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 7 210 TONNES FOR THE PERIOD MAY 04 TO DEC 21

	MAY			JUN			JUL			
DAY	DAILY DISCHARGE (m^3/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m^3/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m^3/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAY
1	48.5			65.3	5 S	28.2	10.5	4	3.63	1
2	97.4			61.5	3 S	15.9	10.0	4 S	3.46	2
3	154			66.7	2 S	11.5	9.57	4	3.31	3
4	114	10	96.8	73.6	1	6.36	9.02	3	2.34	4
5	93.8	2 S	16.2	82.0	2 S	14.2	8.89	3 S	2.30	5
6	84.5	1 S	7.30	55.8	2 S	9.64	8.51	3	2.21	6
7	72.7	1	6.28	43.3	2	7.48	7.86	3	2.04	7
8	63.8	1 S	5.51	37.4	1 S	3.23	7.65	3	1.98	8
9	60.4	1 S	5.22	34.5	1	2.98	7.41	3 S	1.92	9
10	68.5	1	5.92	30.1	1 S	2.60	7.42	3	1.92	10
11	74.9	1	6.47	26.9	1	2.32	10.5	3	2.72	11
12	112	2	19.4	23.8	1	2.06	9.25	2 S	1.60	12
13	94.5	1 S	8.16	21.7	1 S	1.87	8.49	2	1.47	13
14	99.4	1	8.59	20.1	1 S	1.74	7.81	2	1.35	14
15	110	1 S	9.50	19.5	1	1.68	7.23	2 S	1.25	15
16	104	1	8.99	18.0	1	1.56	6.85	2	1.18	16
17	100	1 S	8.64	17.0	1 S	1.47	7.31	3	1.89	17
18	98.2	1	8.48	15.8	1 S	1.37	7.21	3	1.87	18
19	86.1	1	7.49	16.9	1	1.46	7.03	3	1.82	19
20	73.3	1	6.33	25.0	2	4.32	6.82	3 S	1.77	20
21	64.3	1 S	5.56	23.5	1 S	2.03	6.79	3	1.76	21
22	63.1	1	5.45	18.4	1	1.59	6.63	3	1.72	22
23	68.1	1	5.88	15.6	1	1.35	6.31	3	1.64	23
24	67.5	1 S	5.83	14.7	1	1.23	38.3	13	41.0	24
25	63.6	2 S	11.0	13.5	1 S	1.17	105	16 S	145	25
26	61.2	1 S	5.29	13.2	1	1.14	75.4	6 S	39.1	26
27	65.1	2 S	11.2	12.4	3 S	3.21	58.3	3	15.1	27
28	64.2	4	22.2	11.9	4	4.11	40.7			28
29	62.5	1 S	5.40	12.1	4	4.18	33.0			29
30	88.8	18 S	138	11.3	4	3.91	29.1			30
31	111	21 S	201				25.1			31
TOTAL	2 588		652	901		146	589.96		289	

	AUG			SEP			OCT			
DAY	DAILY DISCHARGE (m^3/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m^3/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m^3/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAY
1	22.7			11.8			40.4			1
2	21.0			10.9			68.5			2
3	49.1			10.2			32.7			3
4	55.5			9.76			25.2			4
5	31.9			9.31			23.5			5
6	24.0			8.75			26.5			6
7	20.2			8.49			28.8			7
8	18.0			14.2			34.2			8
9	16.4			11.7			27.8			9
10	15.3			10.0			68.4			10
11	14.2			14.3			40.1			11
12	13.6			12.0			33.5			12
13	28.9			11.6			44.9			13
14	19.0			12.7			74.8			14
15	19.6			10.5			70.7			15
16	17.6			9.50			45.5			16
17	15.2			9.94			35.6			17
18	13.3			35.7			30.9			18
19	30.7			19.1			34.0			19
20	21.5			17.8			48.8			20
21	16.7			28.9			37.6			21
22	14.7			20.9			30.6			22
23	13.4			21.3			41.0			23
24	12.4			110			30.6	3 S	10.6	24
25	11.7			42.4			60.3	2 S	5.29	25
								5 S	26.0	
26	11.2			29.2			41.2	2 S	7.12	26
27	10.7			24.1			32.4	1	2.80	27
28	10.4			21.2			29.2	1	2.35	28
29	9.73			19.3			24.5	1	2.15	29
30	17.9			17.8			24.0	2 S	4.15	30
31	14.0						30.9	1 S	2.67	31
TOTAL	610.53		0	603.35		0	1 215.1		63	

S - SAMPLE(S) COLLECTED THIS DAY

NEWFOUNDLAND

HARRYS RIVER BELOW HIGHWAY BRIDGE - STATION NO. 02YJ001

SUSPENDED SEDIMENT FOR 1990

	NOV			DEC						
DAY	DAILY DISCHARGE (m^3/s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m^3/s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m^3/s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAY
1	28.7	1	2.48	42.8	1 S	3.70				1
2	24.6	1	2.13	37.0	1 S	3.20				2
3	22.6	1 S	1.95	32.4	2 S	5.60				3
4	21.6	2 S	3.73	28.9	1 S	2.50				4
5	72.1	10 S	62.3	26.5	1 S	2.29				5
6	40.4	3 S	10.5	31.5	1 S	2.72				6
7	32.3	5	5.98	29.2						7
8	28.4	5 S	4.91	27.3						8
9	26.2	5	4.53	304						9
10	24.5	2 S	4.23	176						10
11	23.1	3 S	5.99	113	10 S	97.6				11
12	27.4	4	9.47	89.9	8	62.1				12
13	25.6	2	4.42	76.2	7	46.1				13
14	23.3	2	4.03	69.4	5 S	30.0				14
15	21.7	1 S	1.87	59.7	3	15.5				15
16	20.7	1 S	1.79	52.4	11	49.8				16
17	20.3	1 S	1.75	58.2	14	70.4				17
18	25.6	5 S	11.1	56.7	39	191				18
19	81.2	22	154	152	312 S	4 100				19
20	82.4	5 S	35.6	94.6	107	875				20
21	64.9	2	11.2	68.6	13	77.1				21
22	52.1	2	9.00	58.5						22
23	45.1	2 S	7.79	63.8						23
24	67.5	6 S	11.7	122						24
25	65.8	1 S	5.69	123						25
26	62.9	2	10.9	83.0						26
27	57.6	1	4.98	69.2 A						27
28	48.0	1	4.15	60.0 B						28
29	48.4	3 S	12.5	53.0 B						29
30	56.8	2 S	9.82	47.0 B						30
31				43.0 B						31
TOTAL	1 241.8		420	2 348.8		5 635				

A - MANUAL GAUGE B - ICE CONDITIONS S - SAMPLE(S) COLLECTED THIS DAY

NEWFOUNDLAND

HARRYS RIVER BELOW HIGHWAY BRIDGE - STATION NO. 02YJ001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m^3/s)	SINGLE VERTICAL SAMPLING (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
MAY 03	12:35	0.3	317	15	D49	24															
MAY 05	15:50	5.5	90.7	15	D49	1															
MAY 06	17:20	4.5	79.4	15	D49	1															
MAY 08	18:20	6.5	60.6	15	D49	1															
MAY 09	16:50	4.0	57.5	15	D49	1															
MAY 13	19:20	7.0	88.7	15	D49	1															
MAY 15	18:15	7.0	102	15	D49	1															
MAY 17	20:00	6.0	88.5	15	D49	1															
MAY 21	18:20	6.0	58.6	15	D49	1															
MAY 24	11:15	3.0	60.0	15	D49	1															
MAY 25	19:20	8.0	54.6	15	D49	2															
MAY 26	18:10	9.0	52.2	15	D49	1															
MAY 27	19:25	10.0	70.0	15	D49	2															
MAY 29	17:40	11.0	53.3	15	D49	1															
MAY 30	17:15	6.5	92.9	15	D49	29															
JUN 01	19:15	7.0	56.8	15	D49	3															
JUN 03	18:05	11.0	57.6	15	D49	2															
JUN 05	18:40	8.0	70.0	15	D49	2															
JUN 06	18:05	10.5	48.8	15	D49	2	106														
JUN 08	18:15	13.0	34.8	15	D49	1															
JUN 10	19:30	14.0	27.4	15	D49	1															
JUN 13	12:40	13.0	21.0	15	D49	1															
JUN 14	17:20	16.0	19.0	15	D49	1															
JUN 17	18:15	16.0	16.3	15	D49	1															
JUN 18	19:15	15.0	15.1	15	D49	1															
JUN 21	15:50	12.0	21.9	15	D49	1															
JUN 25	19:30	14.5	13.7	15	D49	1															
JUN 27	20:20	20.0	11.9	15	D49	4															
JUL 02	15:55	21.5	9.97	15	D49	4															
JUL 05	18:05	17.0	8.86	15	D49	3															
JUL 09	18:50	18.0	7.38	15	D49	3															
JUL 12	18:25	16.0	9.98	15	D49	2															
JUL 15	19:45	21.0	7.25	15	D49	3															
JUL 20	19:00	23.0	27.0	15	D49	3															
JUL 25	19:15	18.0	95.7	15	D49	11															
JUL 26	13:50	17.0	63.3	15	D49	6															
JUL 28	11:35	16.0	41.1	15	D49	3															
OCT 22	18:00	9.0	29.1	15	D49	2	112														
OCT 23	18:10	9.0	40.1	15	D49	2															
OCT 25	17:35	9.0	66.3	15	D49	3															
OCT 26	13:50	8.0	39.5	15	D49	2															
OCT 29	11:30	2.0	24.7	15	D49	1															
OCT 30	12:30	7.0	23.7	5.0	DH48	3															
OCT 31	12:50	7.0	33.8	15	D49	1															
NOV 03	11:55	4.5	22.6	15	D49	1															
NOV 04	11:50	5.0	21.2	15	D49	1															
NOV 05	12:45	5.0	83.6	5.0	DH48	7															
NOV 06	12:35	5.0	38.8	15	D49	3															
NOV 08	16:45	4.0	26.0	15	D49	1															
NOV 10	12:15	5.0	23.9	15	D49	2															
NOV 11	14:25	5.0	22.6	5.0	DH48	3															
NOV 14	13:00	3.0	22.9	15	D49	8															
NOV 15	12:50	4.0	21.5	15	D49	1															
NOV 16	12:10	5.0	20.3	15	D49	1															
NOV 17	12:25	5.0	19.9	15	D49	1															
NOV 18	11:30	5.0	23.6	15	D49	4															
NOV 20	09:45	6.0	78.2	15	D49	2															
NOV 23	15:15	6.0	151	15	D49	1															
NOV 24	14:05	5.5	170	15	D49	1															
NOV 25	15:50	5.0	175	15	D49	1															
NOV 29	12:55	5.0	93.2	15	D49	1															
NOV 30	10:25	3.0	167	15	D49	1															
DEC 01	14:15	3.0	148	15	D49	1															
DEC 02	15:00	3.5	136	15	D49	1															
DEC 03	11:00	3.0	130	15	D49	1															
DEC 04	11:45	2.0	121	15	D49	1															
DEC 05	10:40	5.0	26.2	5.0	DH48	1															
DEC 06	12:25	3.0	30.7	5.0	DH48	1															
DEC 07	11:20	3.0	28.6	15	D49	1															
DEC 08	13:40	3.0	23.9	5.0	DH48	1															
DEC 11	10:30	3.5	116	15	D49	10															
DEC 14	11:55	3.0	71.1	15	D49	5															
DEC 19	12:05	2.0	235	15	D49	385															

NOTE: SINGLE VERTICAL IS LOCATED AT 15.0 METRES FOR 1990

HARRYS RIVER BELOW HIGHWAY BRIDGE - STATION NO. 02YJ001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-DEC MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	HISTORICAL STANDARD ERROR OF MEAN %
1979	-PPP--PCCCCC	MANUAL	12	APR 25	1	JUL 10	67.4	NOV 11	1 030	---	---	---
1980	CCCCCCCCCCCC	MANUAL	18	OCT 13	1	JAN 1	341	NOV 6	3 830	13.7	13.7	---
1981	CCCCCCCCCCCC	MANUAL	27	JUL 28	1	JAN 1	270	DEC 4	4 900	15.7	14.7	6.9
1982	CCCCCCCCCCCC	MANUAL	26	NOV 5	1	JAN 1	531	APR 30	7 830	26.3	18.6	21.1
1983	CCCCCCCCCCCC	MANUAL	31	DEC 16	1	JAN 10	382	JAN 13	9 450	26.2	20.5	16.6
1984	CCCCCCCCCCCC	MANUAL	83	JUL 17	1	NOV 12	236	MAY 16	9 670 *	29.1	22.2	14.1
1985	CCCCCCCCCCCC	MANUAL	102	JUN 7	1	MAR 19	1 980	JUN 7	9 230	30.4	23.6	12.3
1986	CCCCCCCCCCCC	MANUAL	12	FEB 27	1	MAY 12	307	APR 17	5 030	13.9	22.2	12.7
1987	CCCCCCCCCCCC		194	SEP 2	0	MAY 16 *	591	APR 19	3 890	13.6	21.1	12.6
1988	PPPCPPPCPPP-	MANUAL	16	APR 8	1	JUN 7	67.9	JUL 13	2 040	---	---	---
1989	---PCPPPPP-P	MANUAL	107	MAY 3	1	APR 22	842	MAY 3	2 970	---	---	---
1990	----PCP--PCP	MANUAL	385	DEC 19 *	1	MAY 5	4 100	DEC 19 *	7 200	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

HIGHLANDS RIVER AT TRANS-CANADA HIGHWAY - STATION NO. 02ZA002

LOCATION: LAT 48 06 33 N LONG 058 47 04 W
DRAINAGE AREA: 72 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)		TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAY 03	15:36	5.0	14.2	15	X	PS82	11															
MAY 03	15:37	5.0	14.2	15	X	PS82	15															
MAY 03	16:15	5.0	9.09	15	X	PS82	13															
MAY 03	16:40	5.0	14.0	8		DH48	3															
MAY 04	11:00		6.66	15	X	PS82	5															
MAY 04	17:00		6.07	15	X	PS82	4															
MAY 05	00:30		5.60	15	X	PS82	15															
MAY 06	06:00		5.11	15	X	PS82	4															
MAY 06	18:00		4.88	15	X	PS82	4															
MAY 07	00:30		1.79	15	X	PS82	3															
MAY 07	06:00		1.39	15	X	PS82	10															
MAY 07	12:00		3.21	15	X	PS82	3															
MAY 08	02:00		3.02	15	X	PS82	11															
MAY 08	06:30		2.85	15	X	PS82	6															
MAY 09	02:00		4.20	15	X	PS82	6															
MAY 11	12:00		6.66	15	X	PS82	7															
MAY 11	18:00		6.66	15	X	PS82	18															
MAY 11	23:00		6.95	15	X	PS82	16															
MAY 12	03:00		13.5	15	X	PS82	34															
JUL 18	12:14	16.0	0.781	15	X	PS82	9															
JUL 18	12:15	16.0	0.781	8		DH48	3															
JUL 18	18:15	16.0	1.52	15	X	PS82	9															
JUL 19	00:15		1.19	15	X	PS82	5															
JUL 19	06:15		0.884	15	X	PS82	3															
JUL 20	00:15		1.19	15	X	PS82	17															
JUL 20	06:15		1.52	15	X	PS82	26															
JUL 20	12:15		1.85	15	X	PS82	8															
JUL 20	18:15		1.29	15	X	PS82	2															
JUL 21	00:15		0.992	15	X	PS82	2															
JUL 21	06:15		0.884	15	X	PS82	1															
JUL 21	18:15		0.638	15	X	PS82	1															
JUL 22	06:15		0.638	15	X	PS82	3															
JUL 22	12:15		0.638	15	X	PS82	6															
JUL 23	18:15		0.497	15	X	PS82	2															
OCT 04	12:30	9.0	1.92	8		DH48	1															
OCT 04	12:40	9.0	1.92	15	X	PS82	1															
OCT 04	12:41	9.0	1.92	8		DH48	5															
OCT 04	18:40	9.0	1.52	15	X	PS82	9															
OCT 05	00:40		1.46	15	X	PS82	13															
OCT 05	12:35	10.0	1.50	8		DH48	1															
OCT 05	12:36	10.0	1.50	15	X	PS82	1															
OCT 05	12:40	10.0	1.50	15	X	PS82	3															
OCT 05	18:40	10.0	1.50	15	X	PS82	3															
OCT 05	23:30	10.0	1.20	15	X	PS82	13															
OCT 06	06:40		1.50	15	X	PS82	2															
OCT 06	12:40		2.05	15	X	PS82	12															
OCT 06	18:40		1.92	15	X	PS82	18															
OCT 07	00:40		1.78	15	X	PS82	4															
OCT 07	06:40		1.78	15	X	PS82	21															
OCT 07	12:40		1.65	15	X	PS82	8															
OCT 07	18:40		1.65	15	X	PS82	5															
OCT 08	00:40		1.52	15	X	PS82	4															
OCT 08	06:40		1.41	15	X	PS82	10															
OCT 08	12:40		2.35	15	X	PS82	20															
OCT 08	18:40		6.66	15	X	PS82	3															
OCT 09	00:40		2.35	15	X	PS82	3															
OCT 09	06:40		1.78	15	X	PS82	27															
OCT 09	12:40		1.78	15	X	PS82	13															
NOV 22	10:45	4.0	3.24	8		DH48	17															

NOTE: SINGLE VERTICAL IS LOCATED AT 8.0 METRES FOR 1990

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

HIGHLANDS RIVER AT TRANS-CANADA HIGHWAY - STATION NO. 02ZA002

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-DEC MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1981	-------PPPPP	MANUAL	41	DEC 16	2	AUG 20	---	---	---	---	---	---
1982	CCCCCCCCCCCC	MANUAL	44	DEC 29	1	FEB 8 *	210	APR 30	1 130	3.91	3.91	---
1983	CCCCCCCCCCCC	MANUAL	58	JAN 13	1	MAY 10	245	JAN 13	1 910 *	4.15	4.03	2.9
1984	CCCCCCCCCCCC	MANUAL	51	APR 7	1	APR 25	82.0	FEB 5	948	2.43	3.50	15.3
1985	CCCCCCCCCCCC	MANUAL	50	DEC 26	1	MAY 1	59.1	MAY 19	821	2.74	3.31	12.8
1986	CCCCCCCCCCCC	MANUAL	164	JAN 28 *	1	APR 28	992	JAN 28 *	1 700	1.05	2.86	19.5
1987	PP-P-P-P--P-	MANUAL	16	JUN 2	1	FEB 25	---	---	---	---	---	---
1988	-----P----P-	MANUAL	6	NOV 14	3	JUN 1	---	---	---	---	---	---
1989	----PPP--P--	MANUAL	13	JUN 26	5	OCT 2	---	---	---	---	---	---
1990	----P-P--PP-	MANUAL	34	MAY 12	1	JUL 21	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

NEWFOUNDLAND

NORTHEAST BROOK NEAR RODDICKTON - STATION NO. 02YD002

SUSPENDED SEDIMENT FOR 1990

LOCATION: LAT 50 55 44 N LONG 056 06 44 W
DRAINAGE AREA: 200 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 1 190 TONNES FOR THE PERIOD APR 24 TO JUN 26

	APR				MAY				JUN			
DAY	DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAY
1	0.58B				5.61	8 S	3.88		30.7	21 S	55.7	1
2	0.65B				8.15	22 S	15.5		30.1	9	23.4	2
3	0.74B				16.4	22 S	31.2		30.1	12 S	31.2	3
4	0.90B				25.6	21 S	46.4		29.1	19 S	47.8	4
5	1.10B				27.7	29	69.4		27.6	21 S	50.1	5
6	1.50B				25.7	18 S	40.0		25.3	19 S	41.5	6
7	2.30B				23.2	13	26.0		22.2	15 S	26.8	7
8	3.50B				21.4	10 S	18.5		18.9	11 S	16.0	8
9	4.80B				19.5	7 S	11.8		16.1	9 S	12.5	9
10	5.90B				18.2	7 S	11.0		14.0	9 S	10.9	10
11	6.00B				18.0	17 S	26.4		12.1	9 S	9.41	11
12	5.80B				18.0	23 S	35.8		10.3	11 S	9.79	12
13	5.40B				20.1	22 S	38.2		8.87	13 S	9.96	13
14	5.00B				21.8	30 S	56.5		7.63	15	9.89	14
15	4.70B				21.8	32 S	60.3		6.90	14	8.35	15
16	4.45B				20.0	12 S	20.7		6.22	12 S	6.45	16
17	4.50B				18.4	14 S	22.2		5.71	9	4.44	17
18	5.20B				17.6	19	28.9		5.48	6 S	2.84	18
19	5.80B				17.1	17 S	25.1		5.96	5 S	2.57	19
20	6.60B				16.6	12 S	17.2		6.78	12 S	7.03	20
21	7.50B				16.1	6 S	8.35		7.19	14 S	8.70	21
22	7.80B				15.0	8 S	10.4		7.37	14 S	8.91	22
23	7.00B				13.4	9 S	10.4		7.03	6 S	3.64	23
24	6.40B	12 S	6.64		11.8	9 S	9.18		6.51	4	2.25	24
25	6.00B	12 S	6.22		10.4	9 S	8.09		6.72	3	1.74	25
26	5.60B	18	8.71		9.72	7 S	5.88		6.68	3 S	1.73	26
27	5.30B	17 S	7.78		9.89	4 S	3.42		6.38			27
28	5.00B	20 S	8.64		11.6	7 S	7.02		6.12			28
29	4.85B	21 S	8.80		13.8	6 S	7.15		6.12			29
30	4.87B	9 S	3.79		17.6	10 S	15.2		5.79			30
31					26.2	13	29.4					31
TOTAL	135.74		51		536.37		719		385.96		410	

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

NORTHEAST BROOK NEAR RODDICKTON - STATION NO. 02YD002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m^3/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
APR	23 18:25	0.0	18.9	8.0	DH48	25	112														
APR	24 20:10	0.0	19.1	8.0	DH48	4															
APR	25 19:44	0.0	19.1	8.0	DH48	17															
APR	27 18:27	0.0	19.1	8.0	DH48	17															
APR	28 18:25	1.0	19.1	8.0	DH48	20															
APR	29 15:45	1.0	5.80	8.0	DH48	22															
APR	30 18:32	1.0	4.04	8.0	DH48	4															
MAY	01 19:20	1.0	5.69	8.0	DH48	7															
MAY	02 18:37	2.0	8.62	8.0	DH48	9															
MAY	03 18:26	2.0	17.4	8.0	DH48	27															
MAY	04 18:43	2.0	26.9	8.0	DH48	17															
MAY	06 16:00	3.0	25.4	8.0	DH48	22	116														
MAY	07 19:10	3.0	22.6	8.0	DH48	17															
MAY	09 13:45	3.0	18.9	8.0	DH48	12															
MAY	10 18:37	3.0	18.0	8.0	DH48	6															
MAY	11 18:35	3.0	17.8	8.0	DH48	6															
MAY	12 18:30	3.0	17.6	8.0	DH48	22															
MAY	13 14:46	3.0	19.8	8.0	DH48	216															
MAY	14 19:03	3.0	22.0	8.0	DH48	42															
MAY	15 19:28	3.0	21.4	8.0	DH48	32															
MAY	16 10:30	4.0	19.6	8.0	DH48	24															
MAY	16 18:26	4.0	19.6	8.0	DH48	13															
MAY	17 18:30	4.0	18.0	8.0	DH48	7															
MAY	19 16:22	4.0	16.9	8.0	DH48	15															
MAY	20 14:10	4.0	16.5	8.0	DH48	17															
MAY	21 16:44	4.0	16.0	8.0	DH48	12															
MAY	22 18:21	4.0	14.6	8.0	DH48	3															
MAY	23 18:18	4.0	13.0	8.0	DH48	8															
MAY	24 18:32	4.0	11.3	8.0	DH48	1															
MAY	25 18:36	5.0	10.4	8.0	DH48	9															
MAY	26 18:57	5.0	9.48	8.0	DH48	9															
MAY	27 11:46	5.0	9.77	8.0	DH48	6															
MAY	28 18:20	6.0	11.6	8.0	DH48	3															
MAY	30 19:33	6.0	23.1	8.0	DH48	5															
MAY	31 18:40	6.0	29.0	8.0	DH48	15															
JUN	01 18:12	7.0	30.9	8.0	DH48	15															
JUN	02 18:40	8.0	30.0	8.0	DH48	17															
JUN	03 15:00	9.0	30.2	8.0	DH48	8															
JUN	04 17:37	9.0	29.2	8.0	DH48	12															
JUN	05 18:05	9.0	27.9	8.0	DH48	20															
JUN	06 18:44	9.0	24.5	8.0	DH48	16															
JUN	07 18:31	10.0	21.6	8.0	DH48	21															
JUN	08 18:02	10.0	18.5	8.0	DH48	14															
JUN	09 17:40	10.0	16.0	8.0	DH48	6															
JUN	10 14:10	10.0	13.9	8.0	DH48	11															
JUN	11 19:35	10.0	11.6	8.0	DH48	8															
JUN	12 19:56	10.0	9.91	8.0	DH48	17															
JUN	13 14:00	8.0	8.74	8.0	DH48	8															
JUN	13 17:35	8.0	8.74	8.0	DH48	6															
JUN	16 15:45	8.0	6.24	8.0	DH48	14															
JUN	18 18:15	9.0	5.48	8.0	DH48	24															
JUN	19 18:45	9.0	6.01	8.0	DH48	5															
JUN	20 17:43	9.0	6.70	8.0	DH48	6															
JUN	21 17:40	9.0	7.29	8.0	DH48	16															
JUN	22 13:00	9.0	7.32	8.0	DH48	11															
JUN	23 18:38	9.0	6.82	8.0	DH48	10															
JUN	26 13:15	10.0	6.47	8.0	DH48	5															
JUL	04 19:25	11.0	3.85	8.0	DH48	3															
JUL	10 18:45	12.0	2.25	8.0	DH48	4															
JUL	17 19:30	12.0	1.41	8.0	DH48	2															
JUL	26 18:15	12.0	1.76	8.0	DH48	3															
AUG	04 18:40	12.0	1.39	8.0	DH48	1															
AUG	19 13:20	12.0	1.69	8.0	DH48	1															
SEP	09 15:50	11.0	0.638	8.0	DH48	1															
SEP	21 18:40	10.0	1.06	8.0	DH48	1															
OCT	24 12:30	8.0	4.64	8.0	DH48	1															
OCT	28 14:05	8.0	10.8	8.0	DH48	1															

NOTE: SINGLE VERTICAL IS LOCATED AT 8.0 METRES FOR 1990

NORTHEAST BROOK NEAR RODDICKTON - STATION NO. 02YD002

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-DEC MEAN LOAD (TONNES)	SUMMARY : APR-DEC HISTORICAL MEAN LOAD (TONNES)	SUMMARY : APR-DEC STANDARD ERROR OF MEAN %
1981	------CCCCCC	MANUAL	38 DEC 7	1 AUG 8	43.7DEC 11	919	---	---	---
1982	CCCCCCCCCCCC	MANUAL	21 JAN 1	2 FEB 26	45.6JUN 7	1 520 *	4.83	4.83	---
1983	CCCCCCCCCCCC	MANUAL	24 APR 19	2 MAR 2	22.2APR 30	1 130	3.36	4.10	18.0
1984	CCCCCCCCCCCC	MANUAL	52 FEB 11	2 JAN 1	72.1MAY 16	1 520	5.12	4.44	12.3
1985	CCCCCCCCCCCC	MANUAL	28 MAY 24	0 MAY 12 *	99.6MAY 24 *	749	2.50	3.95	15.7
1986	CCCCCCCCCCCC	MANUAL	15 APR 13	1 APR 20	46.7APR 13	446	1.44	3.45	20.1
1987	CCCCCCCCCCCC	MANUAL	9 AUG 25	1 MAR 24	19.6APR 25	311	1.11	3.06	22.5
1988	PPPPCCPPP----	MANUAL	16 MAR 8	1 JAN 12	28.1MAY 24	271	---	---	---
1989	---PCCPPPPP-	MANUAL	13 MAY 31	1 APR 24	10.2MAY 8	208	---	---	---
1990	---PCPPPPP--	MANUAL	216 MAY 12 *	1 MAY 23	69.4MAY 5	1 190	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

NEWFOUNDLAND

NORTHEAST POND RIVER AT NORTHEAST POND - STATION NO. 02ZM006

LOCATION: LAT 47 38 06 N LONG 052 50 14 W
DRAINAGE AREA: 3.63 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	SUMMARY : JAN-DEC HISTORICAL MEAN LOAD (TONNES)	SUMMARY : JAN-DEC STANDARD ERROR OF MEAN %
1970	-CCCCCCCCCCC	MANUAL	38 AUG 19 *	0 SEP 5 *	7.3AUG 19 *	29.*	---	---	---
1971	CCCCCCCCCCCC	MANUAL	8 AUG 5	0 FEB 5	1.1FEB 1	9.53	0.030	0.030	---
1972	CCCCCCCCCCCC	MANUAL	12 MAR 19	0 SEP 1	0.7MAR 20	15.0	0.038	0.03	12.5
1973	CCCCCCCCCCCC	MANUAL	9 MAR 28	0 SEP 10	0.5JUN 10	12.6	0.035	0.03	7.2
1974	CCCCCCCCCCCC	MANUAL	9 MAR 19	0 JUN 13	0.7AUG 31	12.3	0.034	0.03	5.1
1975	CCCCCCCCCCCC	MANUAL	8 MAY 7	1 MAR 24	0.8MAY 7	9.57	0.026	0.03	6.4
1976	CCCCCCCCCCCC	MANUAL	10 JAN 18	0 APR 7	1.2JAN 9	12.4	0.034	0.03	5.3
1977	CCCCCCCCCCCC	MANUAL	7 MAR 12	1 JAN 1	0.7DEC 27	9.48	0.026	0.03	5.5
1978	CCCCCCCCCCCC	MANUAL	5 JAN 11	1 JAN 23	0.4DEC 19	8.15	0.022	0.03	6.3

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

* - EXTREME FOR PERIOD OF RECORD

WATERFORD RIVER AT KILBRIDE - STATION NO. 02ZM008

LOCATION: LAT 47 31 45 N LONG 052 44 43 W
DRAINAGE AREA: 52.7 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)		TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 .004 .008 .016 .031 .062 .125 .250 .500 1.00 2.00	PERCENT SAND SILT CLAY
MAR 20	15:20	2.0	3.70	8.0	X	DH48	15			
APR 05	13:40	4.0	1.35	8.0	X	DH48	5			
APR 23	13:10	5.7	2.59	12.0		DH48	11			
APR 23	13:20		2.18	10.0		PS82	13			
APR 24	06:45		4.77	10.0		PS82	30			
APR 24	06:50	4.0	5.35	8.0	X	DH48	55			
APR 24	13:15		4.77	10.0		PS82	23			
APR 25	06:55		3.41	10.0		PS82	10			
APR 25	07:00	2.5	3.94	8.0	X	DH48	13			
APR 25	13:15		2.97	10.0		PS82	6			
APR 26	13:15		2.29	10.0		PS82	7			
APR 27	13:15		1.95	10.0		PS82	4			
APR 28	13:15		3.85	10.0		PS82	14			
APR 30	13:15		1.68	10.0		PS82	7			
APR 30	14:15	7.0	2.03	12.0		DH48	5			
MAY 01	13:15		1.38	10.0		PS82	6			
MAY 02	13:15		1.38	10.0		PS82	8			
MAY 03	13:15		2.46	10.0		PS82	11			
MAY 04	10:20	5.0	2.36	12.0		DH48	4			
MAY 04	13:15		2.36	10.0		PS82	5			
MAY 05	13:15		1.48	10.0		PS82	17			
MAY 06	13:15		1.24	10.0		PS82	3			
MAY 07	13:15		2.26	10.0		PS82	21			
MAY 08	13:15		5.74	10.0		PS82	14			
MAY 09	13:15		3.12	10.0		PS82	13			
MAY 10	13:15		2.25	10.0		PS82	6			
MAY 11	10:05		2.30	10.0		PS82	68			
MAY 11	10:45	6.0	2.28	12.0		DH48	70			
MAY 11	10:50		2.24	10.0		PS82	46			
MAY 11	13:15		2.00	10.0		PS82	10			
MAY 12	13:15		1.70	10.0		PS82	10			
MAY 13	13:15		1.42	10.0		PS82	13			
MAY 14	13:15		1.20	10.0		PS82	14			
MAY 15	13:15		1.16	10.0		PS82	20			
MAY 16	13:15		1.08	10.0		PS82	13			
MAY 17	13:15		1.00	10.0		PS82	14			
MAY 18	13:15		0.928	10.0		PS82	7			
MAY 19	13:15		2.23	10.0		PS82	14			
MAY 20	07:59		25.3	10.0		PS82	1144			
MAY 20	08:05	4.0	24.9	8.0	X	DH48	1179			
MAY 20	08:45		25.6	10.0		PS82	1135			
MAY 20	09:30		26.4	10.0		PS82	1386			
MAY 20	10:15		27.8	10.0		PS82	286			
MAY 20	12:50		33.7	10.0		PS82	730			
MAY 20	12:55		33.8	10.0		PS82	342			
MAY 20	14:35	4.0	35.4	8.0	X	DH48	174			
MAY 20	15:50		35.8	10.0		PS82	227			
MAY 20	18:50		31.4	10.0		PS82	106			
MAY 20	21:50		23.5	10.0		PS82	165			
MAY 21	00:50		18.6	10.0		PS82	125			
MAY 21	03:50		15.0	10.0		PS82	38			
MAY 21	07:12	3.5	13.9	8.0	X	DH48	21	153		
MAY 21	07:15		12.5	10.0		PS82	23			
MAY 22	07:15		12.6	10.0		PS82	45			
MAY 23	07:10	3.5	8.63	8.0	X	DH48	14			
MAY 23	07:15		8.63	10.0		PS82	35			
MAY 24	07:15		4.79	10.0		PS82	17			
MAY 24	13:50		4.60	10.0		PS82	4			
MAY 25	13:50		3.35	10.0		PS82	4			
MAY 25	13:55	4.0	4.60	8.0	X	DH48	3			
MAY 26	13:50		2.72	10.0		PS82	3			
MAY 27	13:50		2.23	10.0		PS82	3			
MAY 28	13:50		1.81	10.0		PS82	4			
MAY 29	13:50		1.51	10.0		PS82	37			
MAY 30	13:50		2.59	10.0		PS82	39			
MAY 31	13:50		2.98	10.0		PS82	14			
JUN 01	13:50		1.70	10.0		PS82	4			
JUN 02	13:50		1.39	10.0		PS82	4			
JUN 03	13:50		1.21	10.0		PS82	21			
JUN 04	13:50		1.08	10.0		PS82	16			
JUN 05	13:50		1.03	10.0		PS82	6			
JUN 06	13:50		4.79	10.0		PS82	9			
JUN 07	13:50		2.06	10.0		PS82	7			
JUN 08	13:50		6.11	10.0		PS82	56			
JUN 09	13:50		4.27	10.0		PS82	24			
JUN 10	13:50		2.69	10.0		PS82	6			
JUN 11	13:50		1.84	10.0		PS82	9			
JUN 11	14:30	12.0	1.84	8.0	X	DH48	15			
JUN 12	13:50		1.56	10.0		PS82	4			
JUN 13	13:50		1.38	10.0		PS82	8			
JUN 14	13:50		1.18	10.0		PS82	6			
JUN 15	13:50		1.08	10.0		PS82	8			
JUN 16	13:50		1.06	10.0		PS82	6			
JUN 19	13:10	17.0	1.14	12.0		DH48	6			
JUN 27	12:40		1.98	10.0		PS82	13			
JUN 27	12:45	17.0	1.98	12.0		DH48	8			
AUG 03	10:40	10.0	0.412	12.0		DH48	7			
AUG 28	14:50	16.0	0.295	12.0		DH48	2			
SEP 26	14:00	12.0	21.7	8.0	X	DH48	19			
OCT 30	14:17	9.0	17.5	8.0	X	DH48	50			
NOV 01	15:00		4.45	10.0		PS82	16			
NOV 15	12:30		1.98	10.0		PS82	14			
DEC 10	10:22	6.5	12.5	8.0	X	DH48	25			

NOTE: SINGLE VERTICAL IS LOCATED AT 12.0 METRES FOR 1990

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

NEWFOUNDLAND

WATERFORD RIVER AT KILBRIDE - STATION NO. 022M008

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)				SAMPLED CONCENTRATION MINIMUM (MG/L)				SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)				SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)		SUMMARY : JAN-DEC MEAN LOAD (TONNES)		HISTORICAL MEAN LOAD (TONNES)		STANDARD ERROR OF MEAN %
1978	----PCCCCCCC	MANUAL	394	JUN	16		5	JUL	1		40.0	DEC	19		308		---		---		---
1979	CCCCCCCCCCCC	MANUAL	303	APR	10		3	FEB	7		111	OCT	31		1 890		5.19		5.19		---
1980	CCCCCCCCCCCC	MANUAL	116	DEC	30		1	FEB	8	*	101	AUG	17		2 390		6.52		5.85		11.4
1981	CCCCCCCCCCCC	MANUAL	229	AUG	19		1	DEC	15		348	NOV	26		3 170	*	8.69		6.80		15.0
1982	CCCCCCCCCCCC		94	SEP	19		1	FEB	13		158	SEP	19		1 320		3.63		6.01		17.9
1983	CCCCCCCCCCCC		49	MAR	21		1	JAN	31		79.6	OCT	26		1 170		3.21		5.45		18.4
1984	CCCCCCCCCCCC		97	APR	29		1	FEB	28		103	APR	14		1 080		2.95		5.03		18.2
1985	CCCCCCCCCCCC	MANUAL	142	APR	17		1	JAN	11		334	MAY	25		1 230		3.36		4.79		16.9
1986	CCCCCCCCCCCC	MANUAL	322	JUN	9		1	MAY	16		373	APR	11	*	1 370		3.76		4.66		15.3
1987	CCCCCCCCCCCC	MANUAL	82	OCT	26		1	APR	1		93.7	APR	3		966		2.65		4.44		15.1
1988	PPPPPPPPPPP-	MANUAL	46	AUG	11		5	JUN	15		---		---		---		---		---		---
1989	--PPPPP-PPP-	MANUAL	147	APR	7		3	MAY	26		---		---		---		---		---		---
1990	--PPPP-PPPPP	MANUAL	1 390	MAY	20	*	2	AUG	28		---		---		---		---		---		---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BARNABY RIVER BELOW SEMIWAGAN RIVER - STATION NO. 01BO003

LOCATION: LAT 46 53 19 N LONG 065 35 44 W
DRAINAGE AREA: 484 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAY-JUN MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1975	---PCCP-----	MANUAL	36 MAY 7 *	1 JUN 29 *	364 MAY 7 *	1 660 *	23.5	23.5	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BECAGUIMEC STREAM AT COLDSTREAM - STATION NO. 01AJ010

LOCATION: LAT 46 20 27 N LONG 067 27 58 W
DRAINAGE AREA: 350 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	PERCENT SILT	PERCENT CLAY
APR	08 16:30	3.5	23.3	MID	D49	22															
APR	10 16:30	3.5	17.6	MID	D49	14															
APR	11 15:00	3.7	13.8	MID	D49	13															
APR	12 06:15	3.0	13.6	MID	D49	12															
APR	13 10:00	3.4	12.9	MID	D49	15															
APR	15 12:30	6.0	15.8	MID	D49	60															
APR	16 16:00	6.2	55.1	MID	D49	54															
APR	20 09:46	5.5	27.3	MID	D49	16															
APR	23 14:15	5.7	38.3	MID	D49	19															
APR	24 14:00	5.4	32.0	MID	D49	17															
APR	25 13:00	5.2	30.8	MID	D49	16															
APR	26 11:00	5.7	27.7	MID	D49	19															
APR	27 13:00	6.2	36.6	MID	D49	29															
MAY	03 15:30	9.0	15.1	MID	D49	21															
JUN	11 10:35	14.0	3.52	MID	SURF	15															
JUN	13 12:11	15.0	3.90	WERB	DH48	6															
JUN	14 19:25	22.0	2.19	WERB	DH48	11															
JUN	18 08:50	20.0	1.65	WERB	DH48	19															
JUN	19 14:00	19.0	4.86	WERB	DH48	14															
JUN	25 09:00	13.0	19.1	WERB	DH48	21															
JUL	03 09:10	19.0	2.14	WERB	DH48	12															
JUL	17 06:30	21.0	0.978	WERB	DH48	6															
JUL	24 09:15	18.0	4.47	WERB	DH48	18															
AUG	02 07:20	16.0	5.24	WERB	DH48	10															
AUG	08 07:25	21.0	1.43	WERB	DH48	3															
AUG	11 09:00	18.0	11.3	MID	D49	175															
AUG	12 09:00	18.0	73.7	MID	D49	190															
AUG	13 07:00	18.0	223	MID	D49	132															
AUG	15 09:50	11.0	35.6	MID	D49	18															
AUG	24 08:50	12.0	3.16	WERB	DH48	1															
AUG	31 07:15	16.0	4.70	WERB	DH48	4															
SEP	05 11:45	15.0	1.91	WERB	DH48	3															
SEP	10 08:15	14.0	1.79	WERB	DH48	2															
SEP	11 13:56	10.5	1.66	WERB	DH48	2															
SEP	18 10:00	12.0	1.98	WERB	DH48	3															
SEP	23 07:00	11.0	2.56	WERB	DH48	5															
OCT	01 14:27	11.5	6.88	WERB	DH48	8															
OCT	03 09:00	8.0	5.69	WERB	DH48	3															
OCT	10 09:00	10.0	8.79	WERB	DH48	12															
OCT	18 08:30	11.0	12.8	WERB	DH48	6															
OCT	25 09:45	7.0	89.0	WERB	DH48	39															

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1990

BECAGUIMEC STREAM AT COLDSTREAM - STATION NO. 01AJ010

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1974	---PCCCCCCCC		709 JUL 10 *	3 JUN 27	4 190 MAY 2 *	15 800 *	---	---	---
1975	---CCCCCCCCC		128 JUN 8	1 APR 1 *	328 APR 20	3 880	14.7	14.7	---
1976	CCCCCCCCCCCC	MANUAL	155 FEB 3	1 AUG 27	896 APR 3	9 550	31.1	22.9	35.7
1977	CCCCCCCCCCCC		94 APR 1	1 AUG 17	559 APR 1	7 170	29.2	25.0	20.7
1978	CCCCCCCCCCCC		127 APR 18	1 SEP 12	273 APR 18	3 830	15.4	22.6	19.4
1989	---PCPPPPPP-	MANUAL	188 MAY 3	1 APR 24	820 MAY 3	1 900	---	---	---
1990	---PPPPPPP--	MANUAL	190 AUG 12	1 AUG 24	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

NEW BRUNSWICK

BLACK BROOK NEAR ST-ANDRE-DE-MADAWASKA - STATION NO. 01AF006

LOCATION: LAT 47 05 29 N LONG 067 43 53 W
DRAINAGE AREA: 14.2 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-NOV MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1971	---PCCCCC---	MANUAL	225	APR 21	0	JUL 25 *	118	APR 20	262	---	---	---
1972	---CCCCCCCCC	AUTO	3 650	JUN 4 *	1	MAY 20	412	JUN 4	1 360 *	5.57	5.57	---
1973	--PCCCCCCCC-	AUTO	1 050	AUG 7	1	APR 15	52.9	APR 29	405	1.66	3.61	54.1
1974	---CC-------		1 880	MAY 1	3	APR 1	557	MAY 1 *	1 180	---	---	---

AUTO - AUTOMATIC SAMPLING MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

COAL BRANCH RIVER AT BERRYVILLE - STATION NO. 01BB001

SUSPENDED SEDIMENT FOR 1990

LOCATION: LAT 46 26 37 N LONG 065 03 55 W
DRAINAGE AREA: 166 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 1 390 TONNES FOR THE PERIOD APR 01 TO OCT 31

DAY	APR DAILY DISCHARGE (m³/s)	APR MEAN CONCENTRATION (mg/L)	APR DAILY LOAD (t)	MAY DAILY DISCHARGE (m³/s)	MAY MEAN CONCENTRATION (mg/L)	MAY DAILY LOAD (t)	JUN DAILY DISCHARGE (m³/s)	JUN MEAN CONCENTRATION (mg/L)	JUN DAILY LOAD (t)	DAY
1	2.70	9 S	2.17	4.36	8 S	3.01	5.60			1
2	3.69	8 S	2.55	3.93	8	2.72	4.27			2
3	3.28	16 S	7.30	3.47	8 S	2.40	3.43			3
4	11.9	88 S	90.5	2.93	7	1.77	3.83			4
5	22.1	53 S	101	2.65	6	1.37	2.54			5
6	17.5	26 S	39.3	5.91	14	7.15	2.22			6
7	12.8	16 S	17.7	7.56	15 S	9.80	1.96			7
8	8.49	8 S	5.87	5.60	7	3.39	3.03			8
9	6.64	7 S	4.02	4.65	6	2.41	2.42			9
10	6.35	7 S	3.84	3.79	5	1.64	1.96			10
11	5.07	6	2.63	3.96	11 S	3.76	1.62			11
12	5.06	5 S	2.19	4.00	12	4.15	1.39			12
13	4.85	5	2.10	3.14	7	1.90	1.30			13
14	5.74	6	2.98	8.87	13 S	10.1	1.10			14
15	9.69	18 S	15.1	7.66	12	7.94	0.95			15
16	25.0	46 S	99.4	5.38	7 S	3.25	0.90			16
17	23.8	37 S	76.1	4.34	6	2.25	0.89			17
18	29.1	86 S	216	9.74	15 S	12.6	0.81			18
19	15.7	15 S	20.3	15.7	34 S	46.1	1.04			19
20	12.6	16 S	17.4	9.32	10 S	8.05	1.12			20
21	16.3	30 S	42.2	8.18	7 S	4.95	1.09			21
22	14.8	25 S	32.0	9.99	14 S	12.1	1.11			22
23	11.2	9	8.71	42.4	70 S	255	1.15			23
24	8.53	6	4.42	29.7	24 S	61.6	2.99			24
25	6.93	5	2.99	13.1	12	13.6	2.93			25
26	6.36	4 S	2.20	7.87	12	8.16	1.94			26
27	6.94	5	3.00	5.66	11 S	5.38	1.31			27
28	7.42	10	6.41	4.43	9	3.44	1.04			28
29	5.90	8	4.08	3.67	7	2.22	0.97			29
30	4.87	8	3.37	6.54	15 S	8.48	0.73			30
31				8.82	17 S	13.0				31
TOTAL	323.4		838	257.22		524	56.57		0	

DAY	JUL DAILY DISCHARGE (m³/s)	JUL MEAN CONCENTRATION (mg/L)	JUL DAILY LOAD (t)	AUG DAILY DISCHARGE (m³/s)	AUG MEAN CONCENTRATION (mg/L)	AUG DAILY LOAD (t)	SEP DAILY DISCHARGE (m³/s)	SEP MEAN CONCENTRATION (mg/L)	SEP DAILY LOAD (t)	DAY
1	0.66			10.6			0.25			1
2	0.58			11.9			0.21			2
3	0.52			8.41			0.21			3
4	0.56			4.34			0.21			4
5	0.60			2.67			0.19			5
6	0.52			1.84			0.21			6
7	0.47			1.25			0.23			7
8	0.49			1.04			0.39			8
9	0.47			1.00			0.29			9
10	0.50			0.91			0.25			10
11	0.50			0.78			0.20			11
12	0.45			0.94			0.20			12
13	0.39			0.93			0.18			13
14	0.36			0.86			0.17			14
15	0.38			1.06			0.14			15
16	0.37			0.78			0.16			16
17	0.34			0.64			0.16			17
18	0.35			0.55			0.15			18
19	0.29			2.12			0.15			19
20	0.28			1.82			0.20			20
21	0.28			1.11			0.84			21
22	0.32			0.78			0.59			22
23	0.33			0.55			0.65			23
24	1.07			0.48			1.37			24
25	9.07			0.44			0.89			25
26	15.2			0.38			0.69			26
27	0.57			0.34			0.51			27
28	4.11			0.36			0.41			28
29	2.44			0.31			0.36			29
30	1.60			0.32			0.34			30
31	1.08			0.24A						31
TOTAL	53.225		0	59.792		0	11.209		0	

A - MANUAL GAUGE

S - SAMPLE(S) COLLECTED THIS DAY

NEW BRUNSWICK

COAL BRANCH RIVER AT BEERSVILLE - STATION NO. 01BS001

SUSPENDED SEDIMENT FOR 1990

DAY	OCT DAILY DISCHARGE (m^3/s)	OCT MEAN CONCENTRATION (mg/L)	OCT DAILY LOAD (t)	NOV DAILY DISCHARGE (m^3/s)	NOV MEAN CONCENTRATION (mg/L)	NOV DAILY LOAD (t)	DEC DAILY DISCHARGE (m^3/s)	DEC MEAN CONCENTRATION (mg/L)	DEC DAILY LOAD (t)	DAY
1	0.36	4	0.126							1
2	0.42	4	0.147							2
3	0.36	4	0.127							3
4	0.31	4	0.109							4
5	0.35	4	0.122							5
6	0.38	4	0.132							6
7	0.34	4	0.119							7
8	0.29	3	0.076							8
9	0.38	5	0.067							9
10	0.91	7 S	0.552							10
11	1.03	7	0.623							11
12	0.81	6	0.422							12
13	0.81	5	0.354							13
14	0.93	6 S	0.482							14
15	1.27	10	1.10							15
16	1.07	10	0.924							16
17	0.80	9	0.628							17
18	0.73	8	0.509							18
19	0.69	7 S	0.417							19
20	0.76	9	0.591							20
21	0.62	9	0.488							21
22	0.54	8	0.377							22
23	0.48	6	0.250							23
24	2.33	31 S	6.24							24
25	4.81	22 S	9.14							25
26	3.32	5 S	1.43							26
27	2.71	6 S	1.40							27
28	2.38	4 S	0.823							28
29	2.39	6 S	1.24							29
30	3.79	11 S	3.60							30
31	2.98	2 S	0.515							31
TOTAL	39.43		33							

S - SAMPLE(S) COLLECTED THIS DAY

COAL BRANCH RIVER AT BEERSVILLE - STATION NO. 01BB001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (m^3/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAR 21	09:45	0.0	16.7	MID	DH59	15	78														
MAR 21	14:45	0.0	18.1	MID	DH59	15															
MAR 21	18:15	0.0	18.7	MID	DH59	34															
MAR 22	08:00	0.0	24.9	MID	DH59	16															
MAR 22	12:00	0.0	20.4	MID	DH59	25															
MAR 22	17:25	0.0	13.4	MID	DH59	21															
MAR 23	07:45	1.0	10.5	MID	DH59	33															
MAR 23	12:25	1.0	11.2	MID	DH59	22															
MAR 23	17:10	0.0	13.2	MID	DH59	53															
MAR 24	08:25	1.0	19.3	MID	DH59	26															
MAR 24	11:40	1.0	19.1	MID	DH59	47															
MAR 24	17:30	0.0	19.8	MID	DH59	348															
MAR 25	09:15	1.0	17.0	MID	DH59	10															
MAR 25	13:30	1.0	13.1	MID	DH59	13															
MAR 25	17:35	0.0	11.9	MID	DH59	19															
MAR 26	07:25	0.0	8.16	MID	DH59	66															
MAR 26	12:30	2.0	8.42	MID	DH59	9															
MAR 26	17:00	1.0	7.70	MID	DH59	13															
MAR 27	08:25	0.0	7.21	MID	DH59	4															
MAR 27	17:30	0.0	7.21	MID	DH59	6															
MAR 28	09:30	1.0	6.68	MID	DH59	7															
MAR 28	17:25	0.0	5.77	MID	DH59	4															
MAR 29	09:00	0.0	4.47	MID	DH59	6															
MAR 29	17:30	0.0	4.27	MID	DH59	5															
MAR 30	06:00	1.0	4.17	MID	DH59	7															
MAR 30	16:55	1.0	4.11	MID	DH59	9															
MAR 31	08:30	0.0	3.24	MID	DH59	7															
MAR 31	17:00	1.0	2.93	MID	DH59	5															
APR 01	00:25	2.0	2.65	MID	DH59	6															
APR 01	16:20	2.0	2.90	MID	DH59	11															
APR 02	08:00	1.0	3.94	MID	DH59	6	76														
APR 02	16:30	2.0	3.79	MID	DH59	8															
APR 03	06:30	0.5	4.89	MID	DH59	14															
APR 03	15:40	1.0	5.70	MID	DH59	17															
APR 04	07:30	1.0	8.16	MID	DH59	29															
APR 04	16:15	2.0	14.7	MID	DH59	138															
APR 05	06:40	2.0	23.4	MID	DH59	57															
APR 05	11:00	2.0	21.9	MID	DH59	52															
APR 05	17:00	2.0	21.2	MID	DH59	33															
APR 06	07:40	2.0	17.7	MID	DH59	18															
APR 06	10:00	3.0	16.8	MID	DH59	15															
APR 06	17:45	3.0	16.6	MID	DH59	33															
APR 07	07:55	1.0	13.5	MID	DH59	10															
APR 07	13:20	1.0	12.3	MID	DH59	14															
APR 07	17:30	1.0	11.5	MID	DH59	14															
APR 08	08:40	0.5	8.16	MID	DH59	27															
APR 08	17:35	2.0	8.09	MID	DH59	5															
APR 09	06:35	2.0	5.88	MID	DH59	5															
APR 09	16:15	4.0	6.92	MID	DH59	6															
APR 10	08:00	2.0	6.49	MID	DH59	25															
APR 12	11:45	0.0	4.89	MID	DH59	31															
APR 15	19:30	3.0	11.9	MID	DH59	31															
APR 16	09:15	4.0	19.1	MID	DH59	31															
APR 16	17:20	5.0	31.5	MID	DH59	50															
APR 16	19:45	4.0	35.9	MID	DH59	54															
APR 17	09:10	3.0	21.9	MID	DH59	32															
APR 17	18:45	3.0	19.8	MID	DH59	35															
APR 18	08:30	3.0	33.7	MID	DH59	20															
APR 18	18:50	4.0	23.9	MID	DH59	65															
APR 19	09:25	2.0	15.4	MID	DH59	13															
APR 20	09:45	4.0	11.0	MID	DH59	14	70														
APR 21	15:35	5.0	16.9	MID	DH59	22															
APR 22	17:00	5.0	13.7	MID	DH59	21															
APR 26	12:25	10.0	6.26	MID	DH59	4															
MAY 01	19:00	15.0	4.21	MID	DH59	8															
MAY 03	12:00	9.0	3.78	MID	DH59	9															
MAY 07	11:45	6.0	3.46	MID	DH59	11															
MAY 11	11:30	13.0	3.55	MID	DH59	11															
MAY 14	12:00	12.0	12.4	MID	DH59	8															
MAY 16	13:45	10.0	5.37	MID	DH59	7															
MAY 18	08:45	7.0	4.11	MID	DH59	10															
MAY 18	20:00	7.0	19.5	MID	DH59	30															
MAY 19	12:30	7.0	15.9	MID	DH59	30															
MAY 20	12:00	7.0	9.20	MID	DH59	10															
MAY 21	12:10	6.0	8.47	MID	DH59	7															
MAY 22	11:00	6.0	7.41	MID	DH59	11															
MAY 22	19:00	5.5	12.5	MID	DH59	21															
MAY 23	08:45	5.0	44.5	MID	DH59	82															
MAY 23	11:00	5.0	46.9	MID	DH59	74															
MAY 23	16:50	5.0	49.7	MID	DH59	71															
MAY 23	20:15	4.5	49.9	MID	DH59	8															
MAY 24	07:00	4.5	37.0	MID	DH59	30															
MAY 24	10:15	5.0	31.6	MID	DH59	70															
MAY 24	15:15	5.0	25.7	MID	DH59	17															
MAY 24	18:10	5.0	20.6	MID	DH59	14															
MAY 27	16:00	15.0	4.37	MID	DH59	21															
MAY 30	15:15	9.0	4.58	MID	DH59	5															
MAY 30	19:10	8.5	9.79	MID	DH59	28															
MAY 31	09:10	8.0	9.74	MID	DH59	12															
MAY 31	19:00	10.5	5.91	MID	DH59	8															
JUN 01	10:15	14.0	5.11	MID	DH59	6															
JUN 04	11:00	15.0	5.75	MID	DH59	15															
JUN 08	08:45	13.0	5.10	MID	DH59	11															
JUN 10	10:50	17.0	1.77	MID	DH59	36															
JUN 20	19:50	13.0	1.07	MID	DH59	15															
JUN 23	11:15	15.0	1.07	MID	DH59	16															
JUN 24	13:25	15.0	3.88	MID	DH59	29															
JUN 24	19:00	16.0	3.88	MID	DH59	21															
JUN 26	19:30	23.0	1.63	MID	DH59	6															
JUN 30	19:25	22.0	0.661	MID	DH59	16															
JUL 05	11:20	20.0	0.578	MID	DH59	32															
JUL 13	16:40	25.0	0.327	MID	DH59	19															
JUL 18	12:15	26.0	0.284	MID	DH59	18	124														
JUL 24	12:00	17.0	0.308	MID	DH59	116															
JUL 24	18:00	19.0	1.77	MID	DH59	85															
JUL 24	19:25	15.0	1.90	MID	DH59	98															
JUL 25	07:10	18.0	11.2	MID	DH59	90															
JUL 25	09:20	20.0	12.0	MID	DH59	90															
JUL 25	16:10	20.0	10.8	MID	DH59	43															

CONTINUED

COAL BRANCH RIVER AT BEERSVILLE - STATION NO. 01BS001 (CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m^3/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUL 26	08:50	19.0	17.9	MID	DH59	72															
JUL 26	14:45	20.0	20.7	MID	DH59	40	107														
JUL 26	19:30	20.0	16.0	MID	DH59	21															
JUL 27	14:10	21.0	8.16	MID	DH59	11															
JUL 27	19:30	20.0	6.44	MID	DH59	13															
JUL 28	14:30	24.0	3.73	MID	DH59	9															
JUL 28	20:00	21.0	3.33	MID	DH59	11															
JUL 29	19:15	24.0	2.07	MID	DH59	10															
AUG 01	09:00	18.0	10.7	MID	DH59	100															
AUG 01	12:45	20.0	15.2	MID	DH59	74															
AUG 01	20:30	18.0	16.0	MID	DH59	24															
AUG 21	08:20	13.0	1.12	MID	DH59	11	123														
AUG 23	13:35	23.0	0.578	MID	DH59	8															
SEP 01	10:20	18.0	0.150	MID	DH59	41															
SEP 09	10:45	12.0	0.267	MID	DH59	58															
SEP 10	12:00	12.0	0.267	MID	DH59	6															
SEP 14	17:30	17.0	0.164	MID	DH59	23															
SEP 21	08:10	10.0	0.893	MID	DH59	28															
SEP 24	09:02	10.0	0.893	MID	DH59	23															
SEP 24	18:36	13.0	1.10	MID	DH59	5															
OCT 10	12:40	10.0	0.996	MID	DH59	9															
OCT 14	17:25	16.0	1.05	MID	DH59	8															
OCT 19	16:10	11.0	0.661	MID	DH59	8															
OCT 24	12:00	10.0	1.97	MID	DH59	17															
OCT 24	16:25	11.0	3.20	MID	DH59	40															
OCT 25	09:45	8.0	5.11	MID	DH59	18															
OCT 26	14:40	8.0	3.15	MID	DH59	5															
OCT 27	12:06	6.0	2.81	MID	DH59	5															
OCT 28	13:44	5.0	2.34	MID	DH59	4															
OCT 28	17:10	6.0	2.34	MID	DH59	3															
OCT 29	09:45	5.0	2.04	MID	DH59	9															
OCT 29	15:15	5.0	2.27	MID	DH59	6	106														
OCT 31	10:00	5.0	3.10	MID	DH59	2															
NOV 01	11:40	4.0	2.19	MID	DH59	3															
NOV 02	15:50	3.0	1.70	MID	DH59	15															
NOV 04	17:15	0.0	1.63	MID	DH59	18															
NOV 06	12:15	3.0	1.27	MID	DH59	23															
NOV 07	11:45	2.0	3.07	MID	DH59	5															
NOV 08	17:00	2.0	2.73	MID	DH59	24															
NOV 11	14:00	4.0	7.29	MID	DH59	45															
NOV 13	13:00	0.0	3.82	MID	DH59	28															

NOTE: SINGLE VERTICAL IS LOCATED AT 9.0 METRES FOR 1990

COAL BRANCH RIVER AT BEERSVILLE - STATION NO. 01BS001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1984	--PCCCCCCCCC	MANUAL	51 APR 25		1 MAY 7		248 JUL 9		2 030	9.34	9.34	---
1985	CCCCCCCCCCCC	MANUAL	239 JUN 7		0 SEP 12	*	372 JUN 7		850	3.88	6.61	41.3
1986	CCCCCCCCCCCC	MANUAL	124 JUN 8		1 MAY 19		194 APR 13		2 290	* 7.43	6.88	21.2
1987	---CCCCCCCCC	MANUAL	59 APR 7		1 MAR 1		141 APR 5		1 520	6.27	6.73	17.0
1988	--PCCCCCCCCP	MANUAL	208 NOV 21		1 APR 17		532 MAR 28	*	1 710	1.90	5.76	22.7
1989	---CCCCCCCC-	MANUAL	182 APR 6		0 JUL 8		512 AUG 6		1 770	8.19	6.17	18.5
1990	--PCCPPPPCP-	MANUAL	348 MAR 24	*	2 OCT 31		255 MAY 23		1 400	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

NEW BRUNSWICK

DENNIS STREAM NEAR ST. STEPHEN - STATION NO. 01AR006

SUSPENDED SEDIMENT FOR 1990

LOCATION: LAT 45 12 35 N LONG 067 15 45 W
DRAINAGE AREA: 115 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 480 TONNES FOR THE PERIOD APR 01 TO DEC 31

	APR			MAY			JUN			
DAY	DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAY
1	3.24	5 S	1.40	1.78	1 S	0.154	5.89			1
2	3.37	3 S	0.874	1.68	1	0.145	5.47			2
3	3.75	6 S	1.94	1.32	2	0.228	4.43			3
4	12.0	42 S	43.5	1.06	1	0.092	3.51			4
5	15.3	10 S	13.2	1.15	3	0.298	2.80			5
6	16.1	8 S	11.1	1.76	3 S	0.456	2.24			6
7	13.8	6 S	7.15	1.61	2	0.278	1.89			7
8	10.2	5 S	4.41	1.59	2	0.275	1.65			8
9	7.33	6 S	3.80	1.53	2	0.264	1.41			9
10	5.76	4 S	1.99	1.32	1	0.114	1.27			10
11	9.72	23 S	19.3	2.52	8 S	1.74	1.03			11
12	10.0	5 S	4.32	2.50	5	1.08	0.78			12
13	9.18	4 S	3.17	3.11	7 S	1.88	0.64			13
14	7.49	4 S	2.59	10.4	23 S	20.7	0.55			14
15	6.80	5 S	2.94	9.47	6 S	4.91	0.54			15
16	8.75	5 S	3.78	8.41	6 S	4.36	0.50			16
17	8.80	4 S	3.04	6.46	6 S	3.35	0.45			17
18	9.03	4 S	3.12	6.69	7 S	4.05	0.39			18
19	7.51	5 S	3.24	5.98	5 S	2.58	0.64			19
20	6.06	5 S	2.62	5.41	4 S	1.87	0.65			20
21	5.95	5 S	2.57	4.83	4 S	1.67	0.56			21
22	5.76	5 S	2.49	5.83	8 S	4.03	0.51			22
23	5.27	5 S	2.28	7.46	7 S	4.51	0.55			23
24	4.67	3 S	1.21	7.93	8 S	5.48	2.51			24
25	4.05	4 S	1.40	7.06	3 S	1.83	2.59			25
26	3.44	4 S	1.19	6.04	5 S	2.61	2.83			26
27	2.93	5 S	1.27	4.84	5 S	2.09	2.54			27
28	2.56	4 S	0.885	3.59	2 S	0.620	2.23			28
29	2.22	2 S	0.384	2.78	3 S	0.721	1.81			29
30	1.95	1 S	0.168	4.92	24 S	10.2	1.50			30
31				5.49	6 S	2.85				31
TOTAL	212.99		151	136.52		85	54.412		0	

	JUL			AUG			SEP			
DAY	DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAY
1	1.20			0.40			0.15			1
2	1.01			0.38			0.16			2
3	0.84			0.35			0.31			3
4	0.72			0.38			0.22A			4
5	0.64			0.37			0.20E			5
6	0.54			0.34			0.19E			6
7	0.46			0.32			0.20E			7
8	0.42			0.30			0.24E			8
9	0.38			0.28			0.41E			9
10	0.34			0.25			0.35E			10
11	0.31			0.26			0.32E			11
12	0.28			0.41			0.28E			12
13	0.25			0.30			0.25E			13
14	0.22			0.29			0.24E			14
15	0.20			0.25			0.36E			15
16	0.18			0.22			0.62E			16
17	0.17			0.21			0.86E			17
18	0.15			0.20			0.62E			18
19	0.13			0.20			0.55E			19
20	0.12			0.19			0.68E			20
21	0.13			0.17			2.10A			21
22	0.12			0.16			4.40E			22
23	0.15			0.15			3.43A			23
24	0.17			0.14			3.15E			24
25	0.50			0.13			2.63A			25
26	0.97			0.12			2.10A			26
27	0.60			0.35			1.70E			27
28	0.45			0.23			1.42E			28
29	0.39			0.21			1.20E			29
30	0.34			0.18			1.00E			30
31	0.35			0.16						31
TOTAL	12.862		0	8.029		0	30.403		0	

A - MANUAL GAUGE E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

NEW BRUNSWICK

DENNIS STREAM NEAR ST. STEPHEN - STATION NO. 01AR006

SUSPENDED SEDIMENT FOR 1990

DAY	OCT DAILY DISCHARGE (m^3/s)	OCT MEAN CONCENTRATION (mg/L)	OCT DAILY LOAD (t)	NOV DAILY DISCHARGE (m^3/s)	NOV MEAN CONCENTRATION (mg/L)	NOV DAILY LOAD (t)	DEC DAILY DISCHARGE (m^3/s)	DEC MEAN CONCENTRATION (mg/L)	DEC DAILY LOAD (t)	DAY
1	1.02E			3.02	2 S	0.522	3.12	2 S	0.539	1
2	1.07A			2.59	1 S	0.224	2.75	1 S	0.238	2
3	0.94			2.17	1 S	0.187	2.40	1 S	0.207	3
4	0.80			1.86	1	0.161	6.69	19 S	11.0	4
5	1.20			1.75	1 S	0.151	16.3	14 S	19.7	5
6	1.07			2.20	1 S	0.190	14.7	7 S	8.89	6
7	0.88			2.89	2 S	0.499	12.6	5 S	5.44	7
8	0.80			2.74	1 S	0.237	9.96	4 S	3.44	8
9	0.85			2.65	1 S	0.229	7.77	3	2.01	9
10	1.29			2.57	1 S	0.222	5.87	2 S	1.01	10
11	1.26			7.18	9 S	5.58	3.90B	1	0.337	11
12	1.28			6.04	4	2.09	3.00B	5	1.30	12
13	1.52			5.45	2 S	0.942	2.65B	3 S	0.687	13
14	1.75			5.03	1	0.435	2.12B	3	0.601	14
15	1.90			4.43	1 S	0.383	2.60B	3	0.674	15
16	1.97			3.65	2 S	0.631	4.55B	5 S	1.97	16
17	1.66			3.13	2 S	0.541	4.00B	3 S	1.04	17
18	1.51			3.03	2 S	0.524	4.94	2 S	0.854	18
19	1.71			3.16	2 S	0.546	8.88	5 S	3.84	19
20	2.70			3.48	3 S	0.902	7.90B	4 S	2.73	20
21	2.49			3.11	3 S	0.806	7.00B	4 S	2.42	21
22	2.44			2.83	2 S	0.489	7.88	4 S	2.72	22
23	2.35			2.71	2 S	0.468	8.70	4 S	3.01	23
24	8.19			3.31	4	1.14	18.1	59 S	92.3	24
25	9.62			3.87	3 S	1.00	18.3	15 S	23.7	25
26	9.75			3.95	2 S	0.683	14.7	7	8.89	26
27	8.65			3.90	2	0.674	17.4	8	8.57	27
28	9.25			4.03	3	1.04	9.49	7	5.74	28
29	5.37			4.36	3 S	1.13	6.74	5	2.91	29
30	4.49			3.74	3 S	0.969	4.21	4 S	1.49	30
31	3.60						4.47	3	1.16	31
TOTAL	91.375		0	104.83		24	238.99		219	

A - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

DENNIS STREAM NEAR ST. STEPHEN - STATION NO. 01AR006

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAR 23	11:15	4.0	13.7	7.5	DH59	14	34														
MAR 23	18:30	2.0	14.1	7.5	DH59	41															
MAR 24	11:18	3.0	15.2	7.5	DH59	9															
MAR 24	15:30	3.0	14.9	7.5	DH59	8															
MAR 25	06:51	3.0	12.5	7.5	DH59	7															
MAR 25	14:00	4.0	12.0	7.5	DH59	5															
MAR 25	16:30	2.0	11.8	7.5	DH59	4															
MAR 26	09:45	1.0	10.3	7.5	DH59	3															
MAR 26	13:30	4.0	9.99	7.5	DH59	4															
MAR 26	18:00	3.0	9.76	7.5	DH59	4															
MAR 27	10:15	3.0	9.05	7.5	DH59	5	38														
MAR 27	16:30	3.0	7.51	7.5	DH59	8															
MAR 28	12:48	1.0	6.25	7.5	DH59	6															
MAR 28	17:00	3.0	5.27	7.5	DH59	7															
MAR 29	17:00	4.0	4.75	7.5	DH59	3															
MAR 30	17:00	4.0	3.87	7.5	DH59	2															
MAR 31	14:00	3.0	3.52	7.5	DH59	2															
APR 01	16:45	4.0	3.52	7.5	DH59	8															
APR 02	16:30	4.0	3.52	7.5	DH59	3															
APR 03	19:30	5.0	4.24	7.5	DH59	7															
APR 05	10:00	3.0	15.3	7.5	DH59	10															
APR 05	14:20	4.0	15.5	7.5	DH59	9															
APR 05	17:50	4.0	15.7	7.5	DH59	9															
APR 06	10:50	2.0	16.5	7.5	DH59	8															
APR 06	12:35	3.0	16.4	7.5	DH59	8															
APR 06	15:30	5.0	18.0	7.5	DH59	6															
APR 07	09:40	2.0	14.9	7.5	DH59	6															
APR 07	15:30	3.0	14.0	7.5	DH59	7															
APR 07	18:40	2.0	13.7	7.5	DH59	6															
APR 08	09:15	1.0	11.2	7.5	DH59	4															
APR 08	13:16	3.0	10.6	7.5	DH59	5															
APR 08	16:45	4.0	9.87	7.5	DH59	39															
APR 09	10:15	2.0	7.82	7.5	DH59	6															
APR 09	17:00	7.0	7.40	7.5	DH59	7															
APR 10	10:00	4.0	6.25	7.5	DH59	3															
APR 10	19:10	5.0	5.60	7.5	DH59	4															
APR 11	08:30	3.0	9.27	7.5	DH59	41															
APR 11	13:10	3.0	12.3	7.5	DH59	32															
APR 11	17:30	3.0	12.6	7.5	DH59	15															
APR 12	09:45	2.0	10.6	7.5	DH59	5															
APR 12	19:00	4.0	10.4	7.5	DH59	4															
APR 13	08:45	2.0	10.1	7.5	DH59	4															
APR 13	15:30	6.0	9.82	7.5	DH59	4															
APR 13	19:00	5.0	9.64	7.5	DH59	5															
APR 14	10:00	3.0	8.41	7.5	DH59	3															
APR 14	19:45	6.0	7.77	7.5	DH59	4															
APR 15	09:00	4.0	6.77	7.5	DH59	3															
APR 15	17:30	6.0	6.81	7.5	DH59	4															
APR 16	09:00	6.0	11.9	7.5	DH59	5															
APR 16	14:00	8.0	9.87	7.5	DH59	3															
APR 16	18:30	8.0	9.40	7.5	DH59	4	51														
APR 17	09:00	4.0	9.16	7.5	DH59	4															
APR 17	16:30	4.0	9.40	7.5	DH59	3															
APR 18	09:00	3.0	10.1	7.5	DH59	5															
APR 18	17:00	8.0	9.87	7.5	DH59	4															
APR 19	09:30	4.0	8.25	7.5	DH59	3															
APR 19	17:00	8.0	7.82	7.5	DH59	7															
APR 20	09:35	5.0	6.64	7.5	DH59	6															
APR 20	16:30	7.0	6.25	7.5	DH59	4															
APR 21	08:30	7.0	5.98	7.5	DH59	4															
APR 21	20:00	7.0	6.77	7.5	DH59	5	42														
APR 22	13:30	9.0	6.17	7.5	DH59	4															
APR 22	18:00	8.0	6.09	7.5	DH59	5															
APR 23	11:30	8.0	5.75	7.5	DH59	4															
APR 23	17:00	10.0	5.90	7.5	DH59	5															
APR 24	10:00	7.0	5.10	7.5	DH59	3															
APR 25	14:25	10.0	4.36	7.5	DH59	4															
APR 26	18:45	14.0	3.70	7.5	DH59	5															
APR 27	19:00	17.0	3.10	7.5	DH59	5															
APR 28	18:15	13.0	2.87	7.5	DH59	4															
APR 29	16:40	8.0	2.52	7.5	DH59	1	41														
APR 30	09:15	8.0	2.36	7.5	DH59	1															
MAY 01	08:00	13.0	2.10	7.5	DH59	1															
MAY 06	12:30	9.0	2.11	7.5	DH59	2															
MAY 11	16:29	14.0	3.26	7.5	DH59	9															
MAY 13	18:00	15.0	3.43	7.5	DH59	3															
MAY 14	19:36	13.0	10.1	7.5	DH59	9															
MAY 15	14:30	14.0	10.4	7.5	DH59	6															
MAY 15	20:45	12.0	9.89	7.5	DH59	5															
MAY 16	17:15	15.0	8.70	7.5	DH59	4															
MAY 16	21:00	14.0	8.50	7.5	DH59	10															
MAY 17	12:17	14.0	7.00	7.5	DH59	3															
MAY 17	20:20	13.0	6.34	7.5	DH59	6															
MAY 18	15:15	12.0	7.63	7.5	DH59	5															
MAY 18	20:15	11.0	7.26	7.5	DH59	3															
MAY 19	19:00	15.0	6.20	7.5	DH59	3															
MAY 20	14:30	15.0	5.80	7.5	DH59	3															
MAY 20	18:30	14.0	5.73	7.5	DH59	4															
MAY 21	15:30	10.0	5.10	7.5	DH59	1															
MAY 22	15:00	8.0	6.83	7.5	DH59	12															
MAY 22	20:50	8.0	6.91	7.5	DH59	8	44														
MAY 23	06:15	7.0	7.61	7.5	DH59	5															
MAY 23	20:00	7.0	8.70	7.5	DH59	7															
MAY 24	14:00	9.0	8.66	7.5	DH59	10															
MAY 24	21:00	10.0	9.21	7.5	DH59	4															
MAY 25	17:45	14.0	7.40	7.5	DH59	3															
MAY 26	09:00	9.0	6.62	7.5	DH59	3															
MAY 26	19:20	14.0	6.09	7.5	DH59	7															
MAY 27	18:48	16.0	4.97	7.5	DH59	4															
MAY 28	21:00	16.0	3.48	7.5	DH59	2															
MAY 29	20:20	16.0	2.87	7.5	DH59	3															
MAY 30	15:30	10.0	6.44	7.5	DH59	40															
MAY 30	20:45	10.0	6.61	7.5	DH59	13															
MAY 31	17:00	13.0	3.77	7.5	DH59	4															
MAY 31	21:15	13.0	3.75	7.5	DH59	2															
JUN 01	19:30	16.0	5.44	7.5	DH59	5															
JUN 02	20:30	17.0	4.62	7.5	DH59	5															
JUN 03	17:45	20.0	4.57	7.5	DH59	4															
JUN 04	21:00	16.0	3.61	7.5	DH59	1															

CONTINUED

NEW BRUNSWICK

DENNIS STREAM NEAR ST. STEPHEN - STATION NO. 01AR006 (CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m^3/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
JUN 07	14:00	19.0	2.10	7.5	DH59	3	47														
JUN 24	12:30	15.0	3.62	7.5	DH59	10															
JUL 11	09:10	16.0	0.290	7.5	DH59	1															
SEP 21	17:00	15.0	2.10	7.5	DH59	2															
SEP 23	17:00	15.0	3.43	7.5	DH59	7															
SEP 25	18:00	15.0	2.62	7.5	DH59	2															
SEP 26	18:10	15.0	2.10	7.5	DH59	1															
OCT 19	17:15	11.0	3.02	7.5	DH59	7															
OCT 20	18:38	9.0	2.62	7.5	DH59	2															
OCT 21	17:00	10.0	2.52	7.5	DH59	2															
OCT 22	17:30	12.0	2.46	7.5	DH59	2	68														
OCT 23	15:00	11.0	11.9	7.5	DH59	95															
OCT 23	18:00	11.0	11.8	7.5	DH59	40															
OCT 24	09:30	8.0	9.83	7.5	DH59	8															
OCT 24	14:00	11.0	9.83	7.5	DH59	6															
OCT 24	17:10	9.0	9.65	7.5	DH59	6															
OCT 25	09:15	9.0	9.22	7.5	DH59	7															
OCT 25	14:00	9.0	9.56	7.5	DH59	6															
OCT 25	17:27	9.0	9.99	7.5	DH59	6															
OCT 26	14:45	8.0	8.86	7.5	DH59	5															
OCT 27	18:30	7.0	7.25	7.5	DH59	4															
OCT 28	13:00	7.0	6.25	7.5	DH59	3															
OCT 28	17:00	7.0	6.09	7.5	DH59	2															
OCT 29	13:20	7.0	5.58	7.5	DH59	2															
OCT 29	17:30	7.0	5.44	7.5	DH59	1															
OCT 30	16:50	7.0	4.36	7.5	DH59	1															
OCT 31	17:00	6.0	3.52	7.5	DH59	1															
NOV 01	16:45	6.0	2.95	7.5	DH59	2															
NOV 02	17:00	5.0	2.52	7.5	DH59	1															
NOV 03	10:00	5.0	2.42	7.5	DH59	1															
NOV 05	09:25	6.0	1.76	7.5	DH59	1															
NOV 06	17:00	6.0	1.94	7.5	DH59	1															
NOV 07	15:00	5.0	1.87	7.5	DH59	1															
NOV 08	16:45	4.0	1.80	7.5	DH59	1															
NOV 09	17:10	5.0	1.72	7.5	DH59	1															
NOV 10	16:08	5.0	1.56	7.5	DH59	1															
NOV 11	12:30	6.0	7.80	7.5	DH59	10															
NOV 11	17:00	5.0	7.61	7.5	DH59	9															
NOV 13	17:00	3.0	5.35	7.5	DH59	2															
NOV 15	17:00	3.0	4.26	7.5	DH59	1															
NOV 16	16:55	4.0	3.52	7.5	DH59	2	79														
NOV 17	17:00	4.0	2.99	7.5	DH59	2															
NOV 18	15:20	4.0	3.10	7.5	DH59	2															
NOV 19	15:30	1.0	3.10	7.5	DH59	2															
NOV 20	16:30	2.0	3.01	7.5	DH59	3															
NOV 21	16:30	2.0	3.05	7.5	DH59	3															
NOV 22	16:00	4.0	2.74	7.5	DH59	2															
NOV 23	16:45	3.0	2.65	7.5	DH59	2															
NOV 25	16:00	2.0	3.87	7.5	DH59	2															
NOV 26	16:30	2.0	3.96	7.5	DH59	2															
NOV 29	16:40	4.0	4.48	7.5	DH59	4	80														
NOV 30	16:00	4.0	3.70	7.5	DH59	3															
DEC 01	16:30	4.0	3.05	7.5	DH59	1															
DEC 02	16:00	4.0	2.95	7.5	DH59	1															
DEC 03	15:40	3.0	3.34	7.5	DH59	1															
DEC 04	16:20	3.0	3.18	7.5	DH59	21															
DEC 05	07:00	3.0	10.1	7.5	DH59	16															
DEC 05	16:00	1.0	13.0	7.5	DH59	8															
DEC 06	09:30	1.0	13.9	7.5	DH59	7															
DEC 06	16:30	1.0	15.1	7.5	DH59	7															
DEC 07	08:30	1.0	13.0	7.5	DH59	6	52														
DEC 07	12:30	1.0	13.0	7.5	DH59	5															
DEC 07	16:40	2.0	12.2	7.5	DH59	3															
DEC 08	10:30	3.0	10.4	7.5	DH59	4															
DEC 08	15:00	2.0	9.59	7.5	DH59	3															
DEC 10	17:10	3.0	5.44	7.5	DH59	1															
DEC 13	12:35	2.0	3.10 B	7.5	DH59	4															
DEC 16	15:30	1.0	4.76 B	7.5	DH59	8															
DEC 17	15:30	1.0	4.61 B	7.5	DH59	3															
DEC 18	15:00	2.0	4.57	7.5	DH59	2															
DEC 19	16:45	1.0	9.16	7.5	DH59	4															
DEC 20	12:30	1.0	8.45	7.5	DH59	5															
DEC 21	16:45	1.0	8.98	7.5	DH59	5															
DEC 22	16:45	2.0	8.45	7.5	DH59	3															
DEC 23	09:30	4.0	8.45	7.5	DH59	4															
DEC 23	16:20	4.0	8.61	7.5	DH59	6															
DEC 24	11:45	3.0	16.8	7.5	DH59	161															
DEC 24	15:15	2.0	24.5	7.5	DH59	54															
DEC 25	13:00	0.0	18.7	7.5	DH59	8															
DEC 25	16:30	0.0	18.9	7.5	DH59	10															
DEC 30	12:30	3.0	4.13	7.5	DH59	4															

NOTE: SINGLE VERTICAL IS LOCATED AT 7.5 METRES FOR 1990

DISCHARGE SYMBOL(S): B - ICE CONDITIONS

DENNIS STREAM NEAR ST. STEPHEN - STATION NO. 01AR006

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)				SAMPLED CONCENTRATION MINIMUM (MG/L)				SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)				SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-OCT MEAN LOAD (TONNES)	SUMMARY : APR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : APR-OCT STANDARD ERROR OF MEAN %
1984	---CCCCCCCCP	MANUAL	48	APR	6		1	APR	14	*	84.4	APR	6		428	1.96	1.96	---
1985	---CCCCCCCC-	MANUAL	129	MAY	7		1	APR	12		37.3	MAY	22		221	0.696	1.33	47.7
1986	---CCCCCCCCC	MANUAL	43	AUG	24		1	APR	14		38.7	APR	1		331	1.01	1.22	31.2
1987	---CCCCCCCCC	MANUAL	74	APR	1		1	APR	16		198	APR	2	*	671	2.59	1.56	29.9
1988	--PCC--PCCCC	MANUAL	53	AUG	25		1	APR	10		45.7	NOV	2		309	---	---	---
1989	---CCCP-PPC-	MANUAL	116	APR	2		1	MAY	31		91.1	APR	6		744 *	---	---	---
1990	--PCCPP-PPCC	MANUAL	161	DEC	24	*	1	APR	29		92.3	DEC	24		480	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

GRANDE RIVIERE AT VIOLETTE BRIDGE - STATION NO. 01AF007

LOCATION: LAT 47 14 46 N LONG 067 55 16 W
DRAINAGE AREA: 339 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT. CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
APR 14	13:00	0.5	8.79	5	D49	16															
APR 15	14:15	0.5	8.45	5	D49	7															
APR 16	14:40	0.5	11.0	5	D49	19															
APR 17	10:40	0.5	18.1	5	D49	85															
APR 19	10:45	0.5	20.1	5	D49	52															
APR 20	13:10	0.5	19.8	5	D49	50															
APR 20	15:15	1.0	20.3	5	D49	46															
APR 21	11:15	0.5	29.8	5	D49	146															
APR 21	15:30	0.5	31.7	5	D49	163															
APR 22	12:45	1.0	32.1	5	D49	72															
APR 22	17:30	1.0	30.1	5	D49	70															
APR 23	10:10	0.5	40.5	5	D49	93															
APR 23	13:40	0.5	39.6	5	D49	92															
APR 24	09:55	0.5	37.9	5	D49	56															
APR 24	13:45	1.0	36.8	5	D49	41															
APR 25	10:40	0.5	40.4	5	D49	55															
APR 25	13:20	0.5	39.2	5	D49	51															
APR 26	11:05	1.5	34.5	5	D49	30															
APR 26	14:00	3.0	34.5	5	D49	30															
APR 27	10:00	2.0	49.6	5	D49	110															
APR 27	12:25	2.5	50.5	5	D49	102	68														
APR 28	08:45	0.5	65.2	5	D49	103															
APR 28	13:10	1.0	67.4	5	D49	101															
APR 28	17:35	3.0	67.8	5	D49	73															
APR 29	09:30	0.5	61.7	5	D49	48															
APR 29	12:00	1.0	60.2	5	D49	48															
APR 29	20:00	2.0	53.3	5	D49	39															
APR 30	09:50	1.0	43.7	5	D49	29															
APR 30	12:25	1.0	42.4	5	D49	32															
APR 30	14:00	4.0	41.8	5	D49	29															
MAY 01	00:50	2.0	43.7	5	D49	30	66														
MAY 01	11:20	3.0	44.1	5	D49	30															
MAY 01	14:11	4.0	45.5	5	D49	32															
MAY 02	06:40	5.0	46.9	5	D49	31															
MAY 02	17:20	5.0	50.3	5	D49	37															
MAY 02	21:00	4.0	50.5	5	D49	29															
MAY 03	18:00	4.0	36.4	5	D49	18															
MAY 03	19:50	3.0	34.0	5	D49	18															
MAY 04	17:20	4.0	25.7	5	D49	16															
MAY 04	20:50	4.0	24.8	5	D49	13															
MAY 05	10:00	3.0	22.5	5	D49	14	84														
MAY 06	09:27	2.0	20.4	5	D49	11															
MAY 07	10:20	2.0	21.2	5	D49	9															
MAY 08	08:20	2.0	17.8	5	D49	8															
MAY 09	12:40	4.5	14.1	5	D49	7															
MAY 11	09:15	6.0	13.1	5	D49	12															
MAY 17	09:25	6.0	7.43	5	D49	5															
MAY 19	18:50	4.0	12.4	5	D49	6															
MAY 23	08:40	3.0	30.8	5	D49	80															
JUN 01	21:00	11.0	9.29	5	D49	4															
JUN 06	14:00	11.0	5.17	5	D49	13	102														
JUN 06	15:00	12.0	5.14	5	D49	4															
JUN 15	18:25	16.0	5.23	5	D49	11															
JUN 19	18:20	15.0	5.45	5	D49	13															
JUN 25	18:30	16.0	7.04	5	D49	11															
JUL 05	18:30	17.0	1.84	5	D49	7															
JUL 09	18:25	17.0	1.80	5	D49	5															
JUL 13	08:00	18.0	1.71	5	D49	3															
JUL 14	20:20	21.0	1.34	5	D49	4															
JUL 23	18:15	11.0	1.23	5	D49	7															
JUL 25	17:00	11.0	6.26	5	D49	8															
JUL 29	10:45	18.0	2.93	5	D49	8															
AUG 09	18:50	23.0	1.34	5	D49	2															
AUG 12	11:00	18.0	1.58	5	D49	2															
AUG 14	10:20	16.0	5.29	5	D49	20															
AUG 15	19:10	11.0	7.96	5	D49	11															
AUG 20	19:10	11.0	1.65	5	D49	2															
AUG 27	18:00	22.0	1.22	5	D49	14															
AUG 28	18:05	20.0	1.24	5	D49	7															
AUG 30	11:30	18.0	0.18	5	D49	5															
SEP 06	17:00	10.0	0.993	5	D49	2	137														
SEP 07	16:40	13.0	1.25	5	D49	14															
SEP 11	10:25	11.0	1.30	5	D49	3															
SEP 14	10:40	11.0	1.00	5	D49	2															
SEP 16	11:25	11.0	4.72	5	D49	15															
SEP 20	11:20	8.0	1.63	5	D49	2															
SEP 23	11:00	8.0	3.60	5	D49	170															
SEP 25	14:05	7.0	10.7	5	D49	7															
SEP 30	11:03	7.0	3.26	5	D49	6															
OCT 01	13:05	8.0	5.67	5	D49	7															
OCT 05	11:30	8.0	3.85	5	D49	2	105														
OCT 07	11:50	9.0	4.06	5	D49	3															
OCT 09	13:20	6.0	5.67	5	D49	3															
OCT 10	12:45	5.0	20.6	5	D49	45															
OCT 11	13:00	5.0	14.5	5	D49	7															
OCT 13	15:20	11.0	21.1	5	D49	21															
OCT 14	11:44	14.0	63.4	5	D49	162															
OCT 14	15:30	15.0	70.5	5	D49	141															
OCT 14	18:30	15.0	86.1	5	D49	126															
OCT 15	12:50	10.0	90.4	5	D49	44															
OCT 15	16:10	11.0	81.6	5	D49	41	94														
OCT 15	18:10	10.0	72.6	5	D49	40															
OCT 16	09:40	7.0	42.6	5	D49	34															
OCT 16	12:43	5.0	38.3	5	D49	33															
OCT 16	17:45	3.0	35.0	5	D49	26															
OCT 17	09:33	0.5	26.1	5	D49	19															
OCT 17	17:10	2.0	23.7	5	D49	15															
OCT 18	10:20	6.0	19.7	5	D49	12															
OCT 18	17:10	7.0	18.8	5	D49	10															
OCT 25	10:00	3.0	106	5	D49	61															

NOTE: SINGLE VERTICAL IS LOCATED AT 16 METRES FOR 1990

GRANDE RIVIERE AT VIOLETTE BRIDGE - STATION NO. 01AF007

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-OCT MEAN LOAD (TONNES)	SUMMARY : APR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : APR-OCT STANDARD ERROR OF MEAN %
1984	---CCCCCCC--	MANUAL	137 APR 20	3 OCT 23	625 MAY 2	7 810 *	36.5	36.5	---
1985	---CCCCCCCP-	MANUAL	232 APR 22	1 SEP 11 *	354 APR 28	4 880	22.8	29.6	23.1
1986	---PCCCCCCP-	MANUAL	242 APR 22	1 SEP 29	774 APR 22	6 990	---	---	---
1987	---CCCCCCCP-	MANUAL	213 APR 1	1 MAY 5	804 APR 1	3 900	17.6	25.6	21.9
1988	---CCCCCCCP-	MANUAL	592 APR 6	1 JUN 7	791 APR 6	5 300	24.5	25.3	15.7
1989	---PPPPPPPP-	MANUAL	348 MAY 3 *	3 SEP 29	--- ---	---	---	---	---
1990	---PPPPPPP--	MANUAL	170 SEP 23	2 AUG 9	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

HOLMES BROOK AT MOOSE MOUNTAIN - STATION NO. 01AJ006

LOCATION: LAT 46 36 46 N LONG 067 36 38 W
DRAINAGE AREA: 7.77 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	SUMMARY : JAN-DEC HISTORICAL MEAN LOAD (TONNES)	SUMMARY : JAN-DEC STANDARD ERROR OF MEAN %
1971	---PCCCCCCCC	MANUAL	55 MAY 4	0 AUG 30 *	7.5MAY 4	45.9	---	---	---
1972	CCCCCCCCCCCC	MANUAL	85 MAR 18	0 FEB 4	10.7MAR 18	108	0.307	0.307	---
1973	CCCCCCCCCCCC	MANUAL	526 JUL 5 *	0 MAR 17	250 JUL 5 *	823 *	2.29	1.30	76.3
1974	CCCCC-------	MANUAL	261 APR 15	1 JAN 9	67.7APR 15	339	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

HOLMES BROOK NEAR HOLMESVILLE - STATION NO. 01AJ007

LOCATION: LAT 46 34 34 N LONG 067 35 43 W
DRAINAGE AREA: 31.3 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	SUMMARY : JAN-DEC HISTORICAL MEAN LOAD (TONNES)	SUMMARY : JAN-DEC STANDARD ERROR OF MEAN %
1971	---PCCCCCCCC	MANUAL	77 AUG 10	0 MAY 26 *	17.4APR 15	134	---	---	---
1972	CCCCCCCCCCCC	MANUAL	767 MAY 18 *	1 JUL 23	208 MAY 19	973	2.66	2.66	---
1973	CCCCCCCCCCCC	MANUAL	743 JUL 4	0 JAN 5	650 JUL 5 *	3 380 *	9.38	6.02	55.8
1974	CCCCC-------	MANUAL	567 MAY 2	1 JAN 16	248 MAY 2	1 290	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

KENNEBECASIS RIVER AT APOHAQUI - STATION NO. 01AP004

LOCATION: LAT 45 42 07 N LONG 065 36 05 W
DRAINAGE AREA: 1 100 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-OCT MEAN LOAD (TONNES)	SUMMARY : APR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : APR-OCT STANDARD ERROR OF MEAN %
1966	------CCCCCC	MANUAL	80 NOV 4	1 AUG 29 *	185 NOV 4	1 470	---	---	---
1967	CCCCCCCCCCCC	MANUAL	195 NOV 24	0 FEB 21 *	1 480 NOV 24	31 000	89.3	89.3	---
1968	CCCCCCCCCCCC	MANUAL	457 FEB 4	1 OCT 9	2 150 FEB 4	25 900	24.5	56.9	56.9
1969	CCCCCCCCCCCC	MANUAL	215 JAN 19	2 JUN 16	2 340 DEC 23	19 500	34.7	49.5	40.6
1970	CCCCCCCCCCCC	MANUAL	832 MAR 27	2 MAY 11	11 200 FEB 4	41 900	54.6	50.8	28.1
1971	CCCCCCCCCCCC	MANUAL	558 NOV 26	1 OCT 23	7 800 APR 15	28 300	73.4	55.7	21.7
1972	CCCCCCCCCCCC	MANUAL	661 OCT 8	1 FEB 6	5 680 MAY 4	43 900	151	71.6	26.2
1973	CCCCCCCCCCCC	MANUAL	802 APR 29	1 MAR 4	3 020 APR 29	34 400	74.1	72.0	22.0
1974	CCCCCCCCCCCC	MANUAL	463 SEP 30	1 JUN 5	10 100 DEC 10	46 300	86.1	73.8	18.7
1975	CCCCCCCCCCCC	MANUAL	220 DEC 27	3 MAR 10	3 040 NOV 14	25 000	68.0	73.1	16.7
1976	CCCCCCCCCCCC	MANUAL	189 JAN 28	3 AUG 24	4 390 JAN 28	34 800	92.3	71.0	15.7
1977	CCCCCCCCCCCC	MANUAL	249 OCT 9	4 JAN 27	3 370 DEC 26	45 700	127	76.1	14.8
1978	CCCCCCCCCCCC	MANUAL	137 APR 20	2 SEP 6	1 910 APR 21	23 600	73.6	75.9	13.6
1979	CCCCCCCCCCCC	MANUAL	427 APR 10	1 SEP 4	7 650 JAN 3	62 400	102	77.9	12.4
1980	CCCCCCCCCCCC	MANUAL	232 APR 5	1 FEB 2	1 930 APR 5	19 600	47.6	75.7	12.2
1981	CCCCCCCCCCCC	MANUAL	814 OCT 6	1 JUL 26	11 500 FEB 12 *	89 200 *	177	82.5	13.2
1982	CCCCCCCCCCCC	MANUAL	200 APR 1	2 MAY 29	2 160 APR 1	23 700	59.3	81.1	12.7
1983	CCCCCCCCCCCC	MANUAL	144 DEC 14	2 FEB 26	2 200 DEC 14	24 700	40.7	78.7	12.7
1984	CCCCCCCCCCCC	MANUAL	928 APR 6 *	1 MAR 5	3 910 APR 6	43 700	131	81.6	12.1
1985	CCCCCCCCCCCC	MANUAL	335 MAY 22	1 JAN 2	1 400 APR 7	14 300	53.1	80.1	11.8
1986	CCCCCCCCCCCC	MANUAL	318 APR 9	1 FEB 12	3 140 MAR 31	32 400	85.9	80.4	11.1
1987	CCCCCCCCCCCC	MANUAL	93 APR 1	1 MAR 4	1 770 APR 1	16 600	70.8	79.9	10.7
1988	---PCC--PP---	MANUAL	185 APR 11	7 MAY 24	816 MAR 30	10 900	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

LITTLE SOUTHWEST MIRAMICHI RIVER AT LYTTLETON - STATION NO. 01BP001

LOCATION: LAT 46 56 09 N LONG 065 54 26 W
DRAINAGE AREA: 1 340 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAY-JUN MEAN LOAD (TONNES)	SUMMARY : MAY-JUN HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAY-JUN STANDARD ERROR OF MEAN %
1975	---PCCP-----	MANUAL	84 MAY 2 *	4 JUL 3 *	696 MAY 13 *	11 100 *	159	159	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

MIDDLE BRANCH NASHWAAKSIS STREAM NEAR ROYAL ROAD - STATION NO. 01AK005

LOCATION: LAT 46 02 06 N LONG 066 42 05 W
DRAINAGE AREA: 26.9 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	SUMMARY : JAN-DEC HISTORICAL MEAN LOAD (TONNES)	SUMMARY : JAN-DEC STANDARD ERROR OF MEAN %
1965	----------C	MANUAL	24 DEC 19	15 DEC 30	1.5DEC 5	13.7	---	---	---
1966	CCCCCCCCCCCC	MANUAL	70 NOV 3	1 APR 30	18.1NOV 4	92.1	0.252	0.252	---
1967	CCCCCCCCCCCC	MANUAL	75 MAY 12	0 JAN 28 *	28.8MAY 12	187	0.657	0.45	44.5
1968	CCCCCCCCCCCC	MANUAL	28 MAR 20	1 APR 19	6.0FEB 4	114	0.311	0.40	31.0
1969	CCCCCCCCCCCC	MANUAL	48 DEC 11	1 JAN 19	16.4DEC 11	150	0.411	0.40	21.9
1970	CCCCCCCCCCCC	MANUAL	109 MAR 27	1 JAN 27	49.9FEB 4	232	0.637	0.45	18.3
1971	CCCCCCCCCCCC	MANUAL	56 JUL 1	0 JUN 24	19.5MAY 4	154	0.478	0.45	14.8
1972	CCCCCCCCCCCC	MANUAL	43 MAY 4	0 JAN 1	23.8MAY 4	136	0.391	0.44	13.0
1973	CCCCCCCCCCCC	MANUAL	128 APR 29 *	0 AUG 30	157 APR 29 *	448 *	1.24	0.54	20.2
1974	CCCCCCCCCCCC	MANUAL	63 APR 15	0 OCT 10	22.3APR 30	217	0.601	0.55	17.7
1975	CCCCCCCCCCCC	MANUAL	33 NOV 13	0 SEP 1	14.1NOV 14	114	0.321	0.53	17.1
1976	CCCCCCCCCCCC	MANUAL	41 APR 3	1 FEB 29	23.8APR 3	170	0.464	0.52	15.7
1977	CCCCCCCCCCCC	MANUAL	24 MAR 14	0 SEP 11	6.4OCT 2	132	0.370	0.51	14.9
1978	CCCCCCCCCCCC	MANUAL	27 JAN 10	1 FEB 16	8.3JAN 10	89.8	0.246	0.49	14.9

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

NEW BRUNSWICK

NARROWS MOUNTAIN BROOK NEAR NARROWS MOUNTAIN - STATION NO. 01AL004

LOCATION: LAT 46 16 36 N LONG 067 01 17 W
DRAINAGE AREA: 3.89 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-OCT MEAN LOAD (TONNES)	SUMMARY : APR-OCT HISTORICAL MEAN LOAD (TONNES)	SUMMARY : APR-OCT STANDARD ERROR OF MEAN %
1974	---PCCCCCP--		13 AUG 4	0 OCT 7 *	1.3MAY 1	9.93	---	---	---
1975	---PCCCCCC--		14 SEP 28	1 MAY 5	0.4MAY 11	4.27	---	---	---
1976	---CCCCCCC--		32 AUG 10	1 APR 12	2.1AUG 10	13.9	0.065	0.065	---
1977	---CCCCCCC--		51 SEP 27	2 APR 13	1.2JUN 5	21.*	0.101	0.08	22.0
1978	---CCCCCC---		36 JUN 8	1 APR 1	0.4JUN 8	7.58	---	---	---
1979	--PCCCCCCC--		33 AUG 13	1 APR 8	1.0AUG 13	12.0	0.051	0.07	20.7
1980	---PCCCCCC--	MANUAL	24 APR 11	0 OCT 7	1.7APR 11	7.18	---	---	---
1981	---CCCCCCC--	MANUAL	20 SEP 19	1 APR 26	0.6APR 5	10.2	0.048	0.06	18.5
1982	---CCCCCCC--	MANUAL	38 JUL 22	1 MAY 18	0.9APR 18	9.80	0.046	0.06	16.7
1983	---CCCCCCC--	MANUAL	32 APR 17	1 APR 8	2.8APR 18 *	10.5	0.049	0.06	14.5
1984	---CCCCCCC--	MANUAL	45 JUN 15	1 APR 26	0.5APR 7	7.84	0.037	0.05	14.3
1985	---CCCCCCC--	MANUAL	38 JUL 10	1 APR 24	0.6APR 17	4.13	0.019	0.05	16.2
1986	---CCCCCCC--	MANUAL	73 APR 22	1 APR 10	1.4APR 22	7.58	0.035	0.05	15.5
1987	---CCCCCCC--	MANUAL	76 SEP 9 *	1 AUG 20	1.4APR 2	8.40	0.039	0.04	14.1
1988	---PPPP-PP--	MANUAL	56 OCT 23	1 SEP 8	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

NASHWAAK RIVER AT DURHAM BRIDGE - STATION NO. 01AL002

SUSPENDED SEDIMENT FOR 1990

LOCATION: LAT 46 07 33 N LONG 066 36 44 W
DRAINAGE AREA: 1 450 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 7 290 TONNES FOR THE PERIOD APR 01 TO JUN 30

DAY	APR DAILY DISCHARGE (m³/s)	APR MEAN CONCENTRATION (mg/L)	APR DAILY LOAD (t)	MAY DAILY DISCHARGE (m³/s)	MAY MEAN CONCENTRATION (mg/L)	MAY DAILY LOAD (t)	JUN DAILY DISCHARGE (m³/s)	JUN MEAN CONCENTRATION (mg/L)	JUN DAILY LOAD (t)	DAY
1	33.3	3 S	8.63	124	2 S	21.4	81.1	3 S	21.0	1
2	36.3	2 S	6.27	126	4 S	43.5	61.4	3	15.9	2
3	36.5	2 S	6.31	109	2 S	18.8	49.2	3	12.8	3
4	77.2	38 S	253	83.7	1 S	7.23	41.9	3	10.9	4
5	189	57 S	931	70.7	2 S	12.2	39.6	3 S	10.3	5
6	180	26 S	404	76.5	1 S	6.61	36.1	3	9.36	6
7	141	12	146	67.9	1 S	5.87	32.6	3 S	8.45	7
8	105	6 S	54.4	54.6	2 S	9.43	30.1	3	7.80	8
9	86.3	4 S	29.8	45.8	2 S	7.91	27.1	3	7.02	9
10	81.4	6 S	42.2	41.3	2 S	7.14	24.8	2 S	4.29	10
11	65.3	4	22.6	76.4	11 S	72.6	22.7	2	3.92	11
12	62.3	3	16.1	98.5	6 S	51.1	20.5	2	3.54	12
13	53.8	3 S	13.9	65.5	3 S	17.0	18.3	2	3.16	13
14	50.5	2 S	8.73	71.0	5 S	30.7	16.7	2	2.89	14
15	73.7	8 S	50.9	58.9	3	15.3	15.2	2	2.63	15
16	232	61 S	1 220	47.8	3	12.4	14.0	2	2.42	16
17	245	29 S	614	42.0	2	7.26	13.5	2	2.33	17
18	232	17 S	341	72.9	6 S	37.8	13.4	2	2.32	18
19	166	7 S	100	96.6	12	100	19.4	3 S	5.03	19
20	157	5 S	67.8	73.8	5 S	31.9	18.4	2	3.18	20
21	232	17 S	341	59.7	3	15.5	15.6	2	2.70	21
22	221	11 S	210	78.7	3	20.4	20.6	4	7.12	22
23	192	5 S	82.9	134	8 S	92.6	23.7	5	10.2	23
24	184	4 S	63.6	131	5 S	56.6	29.2	5 S	12.6	24
25	174	4 S	60.1	101	4	34.9	40.3	5	17.4	25
26	168	7 S	102	79.3	4	27.4	27.8	2	4.80	26
27	221	15 S	286	66.3	3	17.2	19.9	3	5.16	27
28	261	21 S	474	57.0	3 S	14.8	16.6	3	4.30	28
29	184	8 S	127	47.2	5	20.4	14.4	3	3.73	29
30	133	2	23.0	73.3	12 S	76.0	12.7	3	3.29	30
31				112	8 S	77.4				31
TOTAL	4 273.6		6 106	2 442.4		969	816.8		211	

S - SAMPLE(S) COLLECTED THIS DAY

NEW BRUNSWICK

NASHWAAK RIVER AT DURHAM BRIDGE - STATION NO. 01AL002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m^3/s)	SINGLE SAMPLING VERTICAL	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
APR 01	17:00		32.7	MID	D49	3	38														
APR 02	17:00		36.2	MID	D49	12															
APR 03	04:37		35.4	MID	D49	5															
APR 03	17:00		34.8	MID	D49	5															
APR 04	04:30		41.9	MID	D49	6															
APR 04	17:30		88.7	MID	D49	68															
APR 05	04:30		179	MID	D49	69															
APR 05	18:00		204	MID	D49	49															
APR 06	18:13		170	MID	D49	22															
APR 07	06:00		101	MID	D49	5															
APR 08	14:30		101	MID	D49	5															
APR 09	10:30		86.8	MID	D49	5															
APR 10	10:50		81.6	MID	D49	6															
APR 13	17:30		56.4	MID	D49	3															
APR 14	13:30		44.8	MID	D49	2															
APR 15	14:14		61.0	MID	D49	4															
APR 16	10:10		218	MID	D49	61															
APR 16	17:30		249	MID	D49	71															
APR 17	09:33		241	MID	D49	22															
APR 17	16:13		217	MID	D49	15															
APR 18	09:16		249	MID	D49	19															
APR 18	17:30		218	MID	D49	13	35														
APR 19	07:35		174	MID	D49	9															
APR 19	18:40		152	MID	D49	6															
APR 20	19:00		148	MID	D49	5															
APR 21	20:30		259	MID	D49	21															
APR 22	12:00		220	MID	D49	9															
APR 23	09:42		196	MID	D49	5															
APR 23	16:56		181	MID	D49	4															
APR 24	09:45		184	MID	D49	8															
APR 24	09:50		184	MID	D49	4															
APR 25	17:13		164	MID	D49	4	30														
APR 26	10:28		160	MID	D49	3															
APR 26	20:45		182	MID	D49	12															
APR 27	10:00		216	MID	D49	10															
APR 27	16:00		211	MID	D49	15															
APR 28	09:00		282	MID	D49	24															
APR 29	10:54		189	MID	D49	9															
APR 29	18:15		166	MID	D49	4															
MAY 01	10:31		125	MID	D49	2															
MAY 02	11:30		127	MID	D49	4															
MAY 03	07:37		116	MID	D49	3															
MAY 04	09:31		84.9	MID	D49	2															
MAY 04	18:05		78.7	MID	D49	1															
MAY 05	19:40		67.3	MID	D49	2															
MAY 06	12:00		78.0	MID	D49	1															
MAY 06	19:06		78.0	MID	D49	2															
MAY 07	17:30		63.7	MID	D49	1															
MAY 08	20:00		51.4	MID	D49	2															
MAY 09	12:46		45.5	MID	D49	2															
MAY 09	18:06		43.1	MID	D49	2															
MAY 10	12:55		41.2	MID	D49	1															
MAY 10	17:44		40.2	MID	D49	4															
MAY 11	09:43		48.6	MID	D49	9															
MAY 11	17:44		99.7	MID	D49	19															
MAY 12	08:29		108	MID	D49	6															
MAY 12	19:06		85.5	MID	D49	4															
MAY 13	17:30		57.2	MID	D49	3															
MAY 14	10:41		74.5	MID	D49	4															
MAY 18	20:30		100	MID	D49	11															
MAY 20	14:15		73.0	MID	D49	5															
MAY 21	12:00		124	MID	D49	9	31														
MAY 23	10:51		139	MID	D49	9															
MAY 24	11:25		136	MID	D49	5															
MAY 24	20:45		125	MID	D49	5															
MAY 28	12:00		58.0	MID	D49	3															
MAY 30	14:35		78.4	MID	D49	15															
MAY 31	09:16		121	MID	D49	7															
JUN 01	07:35		90.1	MID	D49	3															
JUN 05	07:00		40.9	MID	D49	3															
JUN 07	13:45		31.7	MID	D49	3															
JUN 10	13:13		24.2	MID	D49	2															
JUN 19	13:00		20.6	MID	D49	3															
JUN 24	19:00		20.3	MID	D49	3															
JUL 03	12:36		36.6	MID	D49	6															
JUL 09	10:35		10.1	MID	D49	3															
JUL 24	10:20		8.28	MID	D49	3															
JUL 26	09:00		11.5	MID	D49	3															
AUG 02	19:00		92.8	MID	D49	26															
AUG 14	20:40		28.9	MID	D49	3															
			45.9	MID	D49	4															

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1990

NASHWAAK RIVER AT DURHAM BRIDGE - STATION NO. 01AL002

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-OCT MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1989	---CPPP-PPP-	MANUAL	89 APR 7 *	1 APR 24 *	2 690 APR 7 *	7 810 *	---	---	---
1990	---CCCPP----	MANUAL	71 APR 16	1 MAY 4	1 220 APR 16	7 290	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

NORTHWEST MIRAMICHI RIVER AT TROUT BROOK - STATION NO. 01BQ001

LOCATION: LAT 47 05 41 N LONG 065 50 14 W
DRAINAGE AREA: 948 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAY-JUN MEAN LOAD (TONNES)	SUMMARY : MAY-JUN HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAY-JUN STANDARD ERROR OF MEAN %
1975	---PCCP-----	MANUAL	42 MAY 7 *	1 MAY 31 *	536 MAY 13 *	5 300 *	79.1	79.1	---

MANUAL - MANUAL SAMPLING
C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

PALMERS CREEK NEAR DORCHESTER - STATION NO. 01BU004

LOCATION: LAT 45 53 14 N LONG 064 30 59 W
DRAINAGE AREA: 34.2 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	SUMMARY : JAN-DEC HISTORICAL MEAN LOAD (TONNES)	SUMMARY : JAN-DEC STANDARD ERROR OF MEAN %
1967	----------C	MANUAL	28 DEC 13	4 DEC 15	19.0DEC 13	52.5	---	---	---
1968	CCCCCCCCCCCC	MANUAL	57 NOV 13	0 APR 10 *	53.7NOV 13	550	2.07	2.07	---
1969	CCCCCCCCCCCC	MANUAL	63 APR 10	2 APR 21	78.0DEC 23	314	0.861	1.46	41.2
1970	CCCCCCCCCCCC	MANUAL	111 APR 25	0 SEP 14	37.3APR 3	307	0.846	1.26	32.2
1971	CCCCCCCCCCCC	MANUAL	141 APR 3 *	0 JUN 23	44.7APR 13	556	1.72	1.38	25.6
1972	CCCCCCCCCCCC	MANUAL	100 MAY 4	0 NOV 24	141 MAY 4 *	954 *	2.62	1.63	31.2
1973	CCCCCCCCCCCC	MANUAL	175 AUG 5	1 JUL 27	49.9AUG 5	392	1.08	1.54	19.5
1974	CCCCCCCCCCCC	MANUAL	135 NOV 26	2 JUL 18	113 NOV 26	552	1.51	1.53	16.4

MANUAL - MANUAL SAMPLING
C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

PETITCODIAC RIVER NEAR PETITCODIAC - STATION NO. 01BU002

LOCATION: LAT 45 56 37 N LONG 065 10 13 W
DRAINAGE AREA: 391 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	SUMMARY : JAN-DEC HISTORICAL MEAN LOAD (TONNES)	SUMMARY : JAN-DEC STANDARD ERROR OF MEAN %
1967	----------C	MANUAL	86 DEC 27	4 DEC 1	141 DEC 13	777	---	---	---
1968	CCCCCCCCCCCC	MANUAL	80 JAN 1	1 DEC 28	394 NOV 13	4 650	12.7	12.7	---
1969	CCCCCCCCCCCC	MANUAL	52 DEC 27	1 JUL 12	258 DEC 23	2 800	7.66	10.2	24.8
1970	CCCCCCCCCCCC	MANUAL	41 MAR 28	1 JAN 23	176 OCT 25	2 360	6.47	8.95	21.4
1971	CCCCCCCCCCCC	MANUAL	107 NOV 26	0 JAN 4 *	376 APR 15	4 360	12.0	9.72	18.0
1972	CCCCCCCCCCCC	MANUAL	113 MAR 26	1 JUN 8	557 MAY 4	5 730	15.6	10.9	19.9
1973	CCCCCCCCCCCC	MANUAL	71 JUL 6	1 MAR 22	533 JUL 6	3 900	10.7	10.9	12.7
1974	CCCCCCCCCCCC	MANUAL	136 APR 4	1 JUL 5	760 DEC 9	7 590	20.8	12.3	14.9
1975	CCCCCCCCCCCC	MANUAL	174 APR 16	1 JUN 27	672 APR 20	6 330	17.3	12.9	13.2
1976	CCCCCCCCCCCC	MANUAL	125 MAR 21	1 FEB 14	742 JAN 28	6 770	18.5	13.5	12.1
1977	CCCCCCCCCCCC	MANUAL	73 DEC 26	1 MAR 2	315 APR 21	6 380	17.5	13.9	10.9
1978	CCCCCCCCCCCC	MANUAL	79 APR 20	1 JUN 14	455 APR 21	3 640	9.96	13.6	10.4
1979	CCCCCCCCCCCC	MANUAL	179 APR 10	1 JUL 25	1 080 JAN 3 *	10 200 *	27.9	14.8	11.9
1980	CCCCCCCCCCCC	MANUAL	129 APR 5	1 MAY 23	589 APR 4	5 510	15.0	14.8	10.9
1981	CCCCCCCCCCCC	MANUAL	190 FEB 12 *	1 JAN 5	895 FEB 12	6 610	18.1	15.4	10.5
1982	CCCCCCCCCCCC	MANUAL	105 APR 18	2 JAN 1	726 APR 18	4 930	13.6	15.3	9.9
1983	CCCCCCCCCCCC	MANUAL	97 MAR 13	3 SEP 13	491 DEC 15	5 380	14.7	15.3	9.3

MANUAL - MANUAL SAMPLING
C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

RENOUS RIVER AT MCGRAW BROOK - STATION NO. 01BO002

LOCATION: LAT 46 49 17 N LONG 066 06 53 W
DRAINAGE AREA: 611 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAY-JUN MEAN LOAD (TONNES)	SUMMARY : MAY-JUN HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAY-JUN STANDARD ERROR OF MEAN %
1975	---PCCP-----	MANUAL	11 MAY 7 *	1 JUN 19 *	113 MAY 13 *	1 290 *	20.1	20.1	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

SAINT JOHN RIVER BELOW MACTAQUAC - STATION NO. 01AK004

LOCATION: LAT 45 57 44 N LONG 066 49 51 W
DRAINAGE AREA: 39 900 km²
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	SUMMARY : HISTORICAL MEAN LOAD (TONNES)	SUMMARY : STANDARD ERROR OF MEAN %
1966	CC---CCCCCCCC	MANUAL	140 NOV 29 *	7 OCT 6	14 500 NOV 5	187 000	---	---	---
1967	CCCCCCCCCCP-	MANUAL	85 MAY 6	1 AUG 22 *	28 100 MAY 6 *	434 000 *	---	---	---
1968	---PC-------	MANUAL	15 APR 27	3 MAY 26	5 110 APR 27	39 700	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

SOUTHWEST MIRAMICHI RIVER AT BLACKVILLE - STATION NO. 01BO001

SUSPENDED SEDIMENT FOR 1990

LOCATION: LAT 46 44 10 N LONG 065 49 36 W
DRAINAGE AREA: 3 050 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 3 420 TONNES FOR THE PERIOD MAY 01 TO MAY 31

MAY

DAY	DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m³/s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAY
1	494	4 S	171							1
2	497	3 S	129							2
3	509	4 S	176							3
4	408	5 S	176							4
5	321	4 S	111							5
6	300	6 S	156							6
7	305	3 S	79.1							7
8	264	2 S	45.6							8
9	232	2	40.1							9
10	205	2	35.4							10
11	198	1	17.1							11
12	298	6 S	154							12
13	269	5 S	116							13
14	233	3 S	60.4							14
15	223	3 S	57.8							15
16	191	3 S	49.5							16
17	172	3 S	44.6							17
18	176	2 S	30.4							18
19	282	7 S	171							19
20	259	8	179							20
21	215	5 S	92.9							21
22	200	3 S	51.8							22
23	298	7 S	180							23
24	368	13 S	413							24
25	300	4 S	104							25
26	243	3	63.0							26
27	205	3	53.1							27
28	179	2	30.9							28
29	162	2	28.0							29
30	172	3	44.6							30
31	319	13	358							31
TOTAL	8 497		3 418							

S - SAMPLE(S) COLLECTED THIS DAY

NEW BRUNSWICK

SOUTHWEST MIRAMICHI RIVER AT BLACKVILLE - STATION NO. 01BO001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m^3/s)	SI SA VI	TYP SAMPLER	SEDIMENT CONCENTRATION (mg/L)	SEDIMENT DISCHARGE (t/d)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										SAND SILT CLAY
								.002	.004	.008	.016	.031	.062	.13	.250	.500	1.00	2.00		
APR 26	17:40	7.0	530	M	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
APR 27	06:50	6.0	550	M														
APR 28	11:00	6.0	824	M														
APR 28	15:30	8.0	883	M														
APR 28	18:00	8.0	914	M														
APR 29	12:40	6.0	818	M														
APR 29	14:45	7.0	797	M														
APR 29	18:45	6.0	761	M														
APR 30	07:00	5.0	639	M														
APR 30	17:35	6.0	565	M														
MAY 01	17:15	12.0	506	M														
MAY 02	13:15	11.0	500	M														
MAY 03	11:00	12.0	539	M														
MAY 03	17:30	10.0	534	M														
MAY 04	17:35	13.0	401	M														
MAY 05	11:00	9.0	340	M														
MAY 05	18:00	9.0	325	M														
MAY 06	12:10	4.0	309	M														
MAY 06	18:50	3.0	318	M														
MAY 07	17:30	10.0	314	M														
MAY 08	16:00	9.0	272	M														
MAY 12	15:10	13.0	333	M														
MAY 13	12:45	11.0	285	M														
MAY 13	17:55	9.0	271	M														
MAY 14	16:20	13.0	245	M														
MAY 15	07:10	8.0	247	M														
MAY 15	17:30	14.0	232	M														
MAY 16	17:10	12.0	202	M														
MAY 17	07:00	10.0	190	M														
MAY 17	17:30	9.0	183	M														
MAY 19	11:20	7.0	312	M														
MAY 21	10:00	6.0	237	M														
MAY 21	18:00	5.0	225	M														
MAY 22	10:00	3.0	217	M														
MAY 23	17:45	3.0	351	M														
MAY 24	17:30	8.0	387	M														
MAY 25	16:30	12.0	316	M														
JUN 11	10:00	14.0	112	M														
				M														

NOTE: SINGLE VERTICAL IS LOCATED AT 60.5 METRES FOR 1990

SOUTHWEST MIRAMICHI RIVER AT BLACKVILLE - STATION NO. 01BO001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (mg/L)		SAMPLED CONCENTRATION MINIMUM (mg/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (tonnes)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD OF RECORD (tonnes)		SUMMARY (APR-OCT TOTAL FOR PERIOD OF RECORD (tonnes)	HISTORICAL STANDARD TOTAL FOR PERIOD OF RECORD (tonnes)	
1975	---PCCP-----	MANUAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1984	---CCCCCCCCC	MANUAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1985	CCCCCCCCCCC	MANUAL											
1986	---CCCCCCC-	MANUAL											
1987	---CCCCCCCCC	MANUAL											
1988	---CCCP-P-P-	MANUAL											
1989	---PCPPP-PP-	MANUAL											
1990	---PCP------	MANUAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

! - EXTREME FOR PERIOD OF RECORD

ANNAPOLIS RIVER AT WILMOT - STATION NO. 01DC005

LOCATION: LAT 44 56 59 N LONG 065 01 47 W

[illegible]

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF RECORD	TYPE OF SAMPLING	SUSPENDED SEDIMENT CONCENTRATION MEAN (mg/L)	SUSPENDED SEDIMENT CONCENTRATION MAXIMUM (mg/L)	SUSPENDED SEDIMENT LOAD DAILY MEAN (tonnes)	SUSPENDED SEDIMENT LOAD TOTAL (tonnes)	SUMMARY 1 JAN-DEC MEAN (mg/L)	SUMMARY 1 JAN-DEC HISTORICAL MEAN (mg/L)	SUMMARY 1 JAN-DEC HISTORICAL STANDARD DEVIATION (mg/L)
[illegible]									
1969		MANUAL	[illegible]				---	---	---
1970		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1971		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1972		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1973		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1974		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1975		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1976		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1977		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1978		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1979		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1980		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1981		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1982		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1983		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1984		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1985		MANUAL	[illegible]				11.4	13.0	7.4
1986	CP-PC	MANUAL	[illegible]				---	---	---
1987	C-PCC-----	MANUAL	[illegible]				---	---	---
1988	P-PCCCCCCCCP	MANUAL	[illegible]				---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

APPLE BROOK AT GILLISDALE - STATION NO. 01FB005

LOCATION: LAT 45 13 53 N LONG 061 08 30 W

[illegible]

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF RECORD	TYPE OF SAMPLING	SUSPENDED SEDIMENT CONCENTRATION MEAN (mg/L)	SUSPENDED SEDIMENT CONCENTRATION MAXIMUM (mg/L)	SUSPENDED SEDIMENT LOAD DAILY MEAN (tonnes)	SUSPENDED SEDIMENT LOAD TOTAL (tonnes)	SUMMARY 1 JAN-DEC MEAN (mg/L)	SUMMARY 1 JAN-DEC HISTORICAL MEAN (mg/L)	SUMMARY 1 JAN-DEC HISTORICAL STANDARD DEVIATION (mg/L)
[illegible]									
1969		MANUAL	[illegible]				---	---	---
1970		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1971		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1972		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1973		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1974		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1975		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1976		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1977		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1978		MANUAL	[illegible]				[illegible]	[illegible]	[illegible]
1979	CCC----------	MANUAL	[illegible]				---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

FRASER BROOK NEAR ARCHIBALD - STATION NO. 01DH003

LOCATION: LAT 45 20 35 N LONG 063 10 05 W
DRAINAGE AREA: 9.07 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: [illegible]

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
[illegible]	[illegible]	MANUAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	CCCCCCCCCCCC	MANUAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1974	CCCCCCCCCCCC	MANUAL	44 MAR 22	0 MAY 27	4.6 MAR 22	61.2	0.168	0.16	21.3
1975	CCCCCCCCCCCC	MANUAL	33 JAN 14	1 JAN 25	3.3 JAN 14	42.0	0.117	0.17	20.1

MANUAL - MANUAL SAMPLING
C - COMPLETE MONTH 1 - EXTREME FOR PERIOD OF RECORD

KELLEY RIVER (MILL CREEK) AT EIGHT MILE FORD - STATION NO. 01DL001

LOCATION: LAT 45 35 10 N LONG 064 27 05 W
DRAINAGE AREA: 63.2 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1971	CCCCCCCCCCCC	AUTO	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

AUTO - AUTOMATIC SAMPLING MANUAL - MANUAL SAMPLING
C - COMPLETE MONTH P - PARTIAL MONTH 1 - EXTREME FOR PERIOD OF RECORD

LITTLE SACKVILLE RIVER AT MIDDLE SACKVILLE - STATION NO. 01EJ004

LOCATION: LAT 44 45 49 N LONG 063 41 20 W
DRAINAGE AREA: 13.1 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002 .004 .008 .016 .031 .062 .125 .250 .500 1.00 2.00	PERCENT SAND SILT CLAY
APR 11	13:45	6.0	6.93	0	D49	160			
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1990

LITTLE SACKVILLE RIVER AT MIDDLE SACKVILLE - STATION NO. 01EJ004

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
[illegible]	[illegible]	MANUAL	[illegible]	[illegible]	--- ---	---	---	---	---
[illegible]	[illegible]	MANUAL	[illegible]	[illegible]	--- ---	---	---	---	---
[illegible]	[illegible]	MANUAL	[illegible]	[illegible]	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

[illegible]

MIDDLE RIVER OF PICTOU AT ROCKLIN - STATION NO. 01DP004

LOCATION: LAT 45 29 50 N LONG 062 48 51 W
DRAINAGE AREA: [illegible] km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1969	-------CCCCC	MANUAL	72 DEC 23	4 SEP 21	188 NOV 9	775	---	---	---
1970	CCCCCCCCCCCC	MANUAL	36 OCT 17	0 SEP 18 *	112 JUL 12	797	2.22	2.22	---
1971	CCCCCCCCCCCC	MANUAL	77 AUG 16	0 SEP 21	313 AUG 16	1 430	4.13	3.18	30.0
1972	CCCCCCCCCCCC	MANUAL	191 MAY 4 *	0 JAN 9	413 MAY 4 *	1 010 *	6.79	4.38	30.2
1973	CCCCCCCCCCCC	MANUAL	40 NOV 29	1 SEP 24	26.5 NOV 29	695	1.90	3.76	29.8
1974	CCCCCCCCCCCC	MANUAL	74 FEB 23	1 NOV 12	145 FEB 23	1 600	4.38	3.89	22.6
1975	CCCCCCCCCCCC	MANUAL	45 MAR 21	1 SEP 15	95.9 MAR 21	840	2.30	3.87	20.4
1976	CCCCCCCCCCCC	MANUAL	43 NOV 8	1 SEP 8	77.3 NOV 8	874	2.39	3.49	18.9
1977	CCCCCCCCCCCC	MANUAL	17 DEC 28	1 MAR 26	40.6 DEC 28	478	1.31	3.21	19.7
1978	CCCCCCCCCCCC	MANUAL	45 JAN 13	1 JAN 7	46.7 JAN 13	316	0.865	2.88	20.9
1979	CCCCCCCCCCCC	MANUAL	52 NOV 14	1 FEB 1	144 NOV 14	1 450	3.97	3.08	18.3
1980	CCCCCCCCCCCC	MANUAL	61 NOV 12	1 JAN 16	161 NOV 12	982	2.70	3.02	16.8
1981	[illegible]	MANUAL	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---
1982	[illegible]	MANUAL	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---
1983	[illegible]	MANUAL	[illegible]	[illegible]	[illegible]	[illegible]	---	---	---
1984	CCCCCCCCCCCC	MANUAL	153 APR 17	0 JUL 28	250 APR 17	687	1.88	2.93	16.1

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH [illegible]

NORTH RIVER AT NORTH RIVER - STATION NO. 01DH004

LOCATION: LAT 45 25 30 N LONG 063 15 20 W
DRAINAGE AREA: [illegible] km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1973	-------P----	MANUAL	382 AUG 22 *	1 AUG 22 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

NOVA SCOTIA

PEMBROKE RIVER AT GLENMERVIE - STATION NO. 01DG019

LOCATION: LAT 45 15 54 N LONG 062 56 29 W
DRAINAGE AREA: 73.3 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	SUMMARY : JAN-DEC HISTORICAL MEAN LOAD (TONNES)	SUMMARY : JAN-DEC STANDARD ERROR OF MEAN %
1978	CCCCCCCCCCCC	MANUAL	13 JAN 15	1 JAN 1	36.8 JAN 15	193	0.530	0.530	---
1979	CCCCCCCCCCCC	MANUAL	66 DEC 17	1 JAN 1	97.5 DEC 17	618 *	1.69	1.11	52.3
1980	CCCCCCCCCCCC	MANUAL	51 APR 5	0 FEB 20 *	88.1 APR 5	463	1.27	1.16	29.2
1981	CCCCCCCCCCCC	MANUAL	59 NOV 21	1 JAN 11	111 NOV 21	534	1.46	1.24	20.3
1982	CCCCCCCCCCCC	MANUAL	45 APR 29	1 JAN 1	116 APR 29	351	0.963	1.18	17.1
1983	CCCCCCCCCCCC	MANUAL	31 MAR 22	1 JAN 1	42.8 MAR 22	407	1.11	1.17	14.2
1984	CCCCCCCCCCCC	MANUAL	107 APR 17 *	1 JAN 6	129 MAR 16 *	574	1.57	1.23	12.3
1985	CCCCCCCCCCCC	MANUAL	79 JUN 17	0 NOV 11	67.4 JUN 17	355	0.973	1.20	11.3
1986	CCCCCCCCCCCC	MANUAL	78 JAN 28	0 OCT 24	103 JAN 28	453	1.24	1.20	9.9

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

* - EXTREME FOR PERIOD OF RECORD

SACKVILLE RIVER AT BEDFORD - STATION NO. 01EJ001

LOCATION: LAT 44 43 53 N LONG 063 39 45 W
DRAINAGE AREA: 146 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
APR 11	11:45		10.3	---	PS82	88															
APR 11	12:00	6.0	10.4	12.0	DH59	613															
APR 12	11:45		26.1	---	PS82	28															
APR 15	11:45		11.5	---	PS82	6															
APR 16	11:45		16.9	---	PS82	30															
APR 17	11:45		17.4	---	PS82	18															
APR 18	00:45		23.6	---	PS82	18															
APR 18	11:45		23.6	---	PS82	14															
APR 19	11:45		18.1	---	PS82	12															
APR 20	11:45		13.9	---	PS82	15															
APR 21	11:45		11.5	---	PS82	1															
APR 22	11:45		13.5	---	PS82	8															
APR 23	11:45		11.9	---	PS82	5															
APR 24	11:45		10.2	---	PS82	3															
APR 25	11:45		8.69	---	PS82	5															
APR 26	11:45		7.23	---	PS82	8															
APR 27	11:45		6.00	---	PS82	13															
APR 28	11:45		5.10	---	PS82	15															
MAY 09	10:15	9.0	4.50	---	DH48	5															
MAY 09	11:00		4.50	---	PS82	6															
MAY 10	11:00		2.62	---	PS82	10															
MAY 11	11:00		5.38	---	PS82	16															
MAY 12	11:00		5.38	---	PS82	6															
MAY 13	11:00		4.85	---	PS82	4															
MAY 14	11:00		6.92	---	PS82	5															
MAY 15	11:00		7.50	---	PS82	2															
MAY 16	11:00		7.70	---	PS82	17															
MAY 18	11:00		11.2	---	PS82	6															
MAY 19	11:00		12.3	---	PS82	16															
MAY 20	11:00		11.0	---	PS82	9															
MAY 21	11:00		9.81	---	PS82	7															
MAY 22	11:00		8.38	---	PS82	6															
MAY 23	09:35	10.0	8.48	12.0	DH48	5															
MAY 23	11:00		8.57	---	PS82	10															
MAY 24	11:00		10.1	---	PS82	7															
MAY 25	11:00		11.6	---	PS82	47															
MAY 26	11:00		10.9	---	PS82	9															
MAY 27	11:00		9.14	---	PS82	4															
MAY 28	11:00		7.64	---	PS82	4															
MAY 28	11:05	12.0	7.64	---	DH48	6															
MAY 29	11:00		5.71	---	PS82	6															
MAY 30	11:00		8.48	---	PS82	48															
MAY 31	11:00		11.0	---	PS82	9															
JUN 01	11:00		10.8	---	PS82	7															
JUN 02	11:00		10.8	---	PS82	9															
JUN 03	11:00		8.42	---	PS82	11															
JUN 04	11:00		8.19	---	PS82	16															
JUN 05	11:00		6.55	---	PS82	6															
JUN 06	11:00		5.63	---	PS82	6															
JUN 07	11:00		4.75	---	PS82	5															
JUN 08	11:00		4.01	---	PS82	5															
JUN 09	11:00		3.37	---	PS82	5															
JUN 10	11:00		2.96	---	PS82	2															
JUN 11	11:00		3.00	---	PS82	7															
JUN 12	11:00		3.25	---	PS82	4															
JUN 13	11:00		2.63	---	PS82	5															
JUN 14	11:00		2.39	---	PS82	3															
JUN 15	11:00		2.19	---	PS82	1															
JUN 15	12:00	16.0	2.19	12.0	DH48	6															
JUN 15	12:02		2.19	---	PS82	5															
JUN 16	11:00		1.99	---	PS82	3															
JUN 17	11:00		1.82	---	PS82	2															
JUL 13	10:40	20.0	0.350	12.0	DH48	2															
JUL 24	10:30		0.367	---	PS82	40															
JUL 25	10:30		0.350	---	PS82	8															
JUL 26	10:30		0.350	---	PS82	13															
JUL 27	10:30		0.294	---	PS82	11															
JUL 28	10:30		0.302	---	PS82	16															
JUL 29	10:30		0.242	---	PS82	7															
JUL 30	10:30		0.194	---	PS82	56															
JUL 31	10:30		0.194	---	PS82	10															
JUL 31	19:15		0.210	---	PS82	8															
AUG 01	01:15		1.46	---	PS82	244															
AUG 01	07:15		1.04	---	PS82	67															
AUG 01	13:15		0.690	---	PS82	78															
AUG 01	19:15		1.74	---	PS82	41															
AUG 02	01:15		1.63	---	PS82	29															
AUG 02	07:15		1.18	---	PS82	24															
AUG 02	13:15		0.885	---	PS82	32															
AUG 02	19:15		0.742	---	PS82	11															
AUG 03	01:15		0.665	---	PS82	2															
AUG 03	07:15		0.615	---	PS82	9															
AUG 03	09:45		0.609	---	PS82	6															
AUG 04	09:45		0.627	---	PS82	4															
AUG 05	09:45		0.579	---	PS82	7															
AUG 06	09:45		0.531	---	PS82	4															
AUG 07	09:45		0.507	---	PS82	8															
AUG 08	09:45		0.495	---	PS82	5															
AUG 09	09:45		1.01	---	PS82	42															
AUG 10	09:45		0.809	---	PS82	11															
AUG 11	09:45		0.722	---	PS82	6															
AUG 12	09:45		1.09	---	PS82	7															
AUG 13	09:45		0.909	---	PS82	1															
AUG 14	09:45		0.941	---	PS82	12															
AUG 14	13:00	23.0	1.06	12.0	DH48	6															
AUG 18	09:45		0.742	---	PS82	10															
AUG 19	09:45		0.831	---	PS82	7															
AUG 20	09:45		0.646	---	PS82	9															
SEP 02	09:45		0.350	---	PS82	7															
SEP 03	09:45		0.585	---	PS82	8															
SEP 04	09:45		0.537	---	PS82	7															
SEP 05	09:45		0.430	---	PS82	10															
SEP 07	11:00	22.0	0.370	12.0	DH48	9															
SEP 16	12:00		0.973	---	PS82	85															
SEP 17	12:00		0.555	---	PS82	35															
OCT 09	09:30	19.0	1.28	12.0	DH48	4															
OCT 09	10:00		1.28	---	PS82	29															
OCT 13	12:00		0.677	---	PS82	3															
OCT 14	12:00		2.04	---	PS82	68															

CONTINUED

SACKVILLE RIVER AT BEDFORD - STATION NO. 01EJ001 (CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m^3/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
OCT 15	12:00		1.34	---	PS82	10															
OCT 24	12:00		3.91	---	PS82	14															
OCT 25	12:00		5.23	---	PS82	138															
NOV 16	11:01	3.0	4.72	---	DH48	7															
DEC 10	08:20	1.0	24.2	---	DH48	11															

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1990

SACKVILLE RIVER AT BEDFORD - STATION NO. 01EJ001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1988	-------P-PPP	MANUAL	21	NOV 21	6	OCT 26	---	---	---	---	---	---
1989	---PPPPPPPP-		75	APR 7	3	JUL 10	---	---	---	---	---	---
1990	---PPPPPPPPP		613	APR 11 *	1	APR 21 *	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

SALMON RIVER AT MURRAY - STATION NO. 01DH002

LOCATION: LAT 45 22 09 N LONG 063 12 55 W
DRAINAGE AREA: 363 km^2
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1967	----------C	MANUAL	29	DEC 29	3	DEC 18	124	DEC 30	690	---	---	---
1968	CCCCCCCCCCCC	MANUAL	141	JAN 16	0	JUN 28 *	405	MAR 14	7 780	21.3	21.3	---
1969	CCCCCCCCCCC	MANUAL	177	MAR 26	1	JUN 17	991	MAR 26	7 690	21.1	21.2	0.6
1970	CCCCCCCCCCCC	MANUAL	39	JUL 12	1	JAN 3	292	JUL 12	2 630	7.21	16.5	28.2
1971	CCCCCCCCCCCC	MANUAL	141	FEB 14	0	SEP 25	2 120	FEB 14	7 760	22.2	18.0	20.0
1972	CCCCCCCCCCC	MANUAL	467	MAY 4 *	0	MAY 28	2 140	MAY 4 *	10 600 *	30.0	20.4	18.1

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

SALMON RIVER AT SALMON RIVER BRIDGE - STATION NO. 01FJ001

LOCATION: LAT 45 56 03 N LONG 060 18 10 W
DRAINAGE AREA: 199 km^2
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-SEP MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1976	-----PPPPPP-	MANUAL	253	JUL 14 *	3	JUN 16	---	---	---	---	---	---
1977	---CCCCCC---	MANUAL	62	JUN 5	1	SEP 2 *	734	JUN 5 *	2 580 *	14.1	14.1	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

SHARPE BROOK AT LLOYDS - STATION NO. 01DD004

LOCATION: LAT 45 01 30 N LONG 064 38 14 W
DRAINAGE AREA: 8.81 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)		SAMPLED CONCENTRATION MINIMUM (MG/L)		SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)		SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1968	-----PCCCCCC	MANUAL	29	NOV 29	0	AUG 8 *	3.9	NOV 29	19.2	---	---	---
1969	CCCCCCCCCCCC	MANUAL	220	SEP 8	1	MAR 31	7.7	DEC 23	36.1	0.099	0.099	---
1970	CCCCCCCCCCCC	MANUAL	137	MAY 13	0	JUL 22	4.3	MAY 13	35.8	0.111	0.10	5.5
1971	CCCCCCCCCCCC	MANUAL	44	AUG 16	0	MAR 26	10.2	AUG 16	56.2	0.158	0.12	14.8
1972	CCCCCCCCCCCC	MANUAL	76	MAY 4	0	MAR 10	21.4	MAY 4 *	103 *	0.284	0.16	25.9
1973	CCCCCCCCCCCC	MANUAL	250	MAR 8 *	0	MAR 15	6.2	MAR 8	43.0	0.122	0.15	21.8
1974	CCCCCCCCCCCC	MANUAL	44	MAR 17	1	JAN 1	3.5	MAR 17	36.8	0.101	0.14	19.9

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

PRINCE EDWARD ISLAND

BRUDENELL RIVER AT BRUDENELL - STATION NO. 01CE004

SUSPENDED SEDIMENT FOR 1990

LOCATION: LAT 46 12 07 N LONG 062 39 23 W
DRAINAGE AREA: 33.1 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 349 TONNES FOR THE PERIOD MAR 19 TO NOV 22

DAY	MAR DAILY DISCHARGE (m³/s)	MAR MEAN CONCENTRATION (mg/L)	MAR DAILY LOAD (t)	APR DAILY DISCHARGE (m³/s)	APR MEAN CONCENTRATION (mg/L)	APR DAILY LOAD (t)	MAY DAILY DISCHARGE (m³/s)	MAY MEAN CONCENTRATION (mg/L)	MAY DAILY LOAD (t)	DAY
1	0.62			0.97			1.24	8 S	0.857	1
2	0.59			1.05			1.23	8	0.850	2
3	0.59			1.17			1.22	6 S	0.632	3
4	0.58			1.48			1.15	6 S	0.596	4
5	0.56			1.77	19 S	2.91	1.14	6 S	0.591	5
6	0.56			1.43	14	1.73	1.67	15	2.16	6
7	0.55			1.32	10 S	1.14	1.63	16 S	2.25	7
8	0.57			1.27	8	0.878	1.34	11 S	1.27	8
9	0.54			1.20	9 S	0.933	1.18	9	0.918	9
10	0.53			1.24	8	0.857	1.13	11 S	1.07	10
11	0.53			2.25	42 S	8.16	1.13	10 S	0.976	11
12	0.52			1.85	25 S	4.00	1.10	11 S	1.05	12
13	0.53			1.40	9 S	1.09	1.06	10	0.916	13
14	0.52			1.33	7	0.804	2.56	22 S	4.87	14
15	0.51			1.36	5 S	0.568	1.86	25 S	4.02	15
16	0.51			1.73	8 S	1.20	1.46	24 S	3.03	16
17	1.43			1.59	3 S	0.412	1.42	13 S	1.59	17
18	4.23			1.97	12 S	2.04	1.36	7	0.823	18
19	1.81	487 S	76.2	1.55	6 S	0.804	1.47	7 S	0.889	19
20	1.18			1.46	9 S	1.14	1.37	8 S	0.947	20
21	1.41			1.70	14	2.06	1.36	5	0.588	21
22	1.30	218 S	24.5	1.77	18	2.75	1.33	5 S	0.575	22
23	1.53			1.57	13	1.76	1.88	26	4.22	23
24	1.68			1.50	8 S	1.04	1.67	29 S	4.18	24
25	1.16			1.44	7	0.871	1.42	17 S	2.09	25
26	1.12			1.41	8 S	0.975	1.35	18	2.10	26
27	1.08			1.43	8 S	0.988	1.32	19	2.17	27
28	1.01			1.39	11 S	1.32	1.30	20 S	2.25	28
29	0.99			1.31	10	1.13	1.26	21 S	2.29	29
30	0.95			1.27	9 S	0.988	1.32	41 S	9.22	30
31	0.93						1.95	29	4.89	31
TOTAL	30.712		101	44.182		43	44.88		64	

DAY	JUN DAILY DISCHARGE (m³/s)	JUN MEAN CONCENTRATION (mg/L)	JUN DAILY LOAD (t)	JUL DAILY DISCHARGE (m³/s)	JUL MEAN CONCENTRATION (mg/L)	JUL DAILY LOAD (t)	AUG DAILY DISCHARGE (m³/s)	AUG MEAN CONCENTRATION (mg/L)	AUG DAILY LOAD (t)	DAY
1	1.46			0.82			0.70			1
2	1.37			0.80			1.70			2
3	1.32			0.78			0.99	221 S	19.0	3
4	1.37			0.84			0.69			4
5	1.35			0.80			0.61			5
6	1.28			0.77	9 S	0.600	0.56			6
7	1.24			0.74			0.54			7
8	1.25			0.73			0.53			8
9	1.20			0.73			0.54			9
10	1.18			0.73	17 S	1.09	0.53			10
11	1.15			0.71	69 S	4.26	0.52			11
12	1.12			0.69	8 S	0.477	0.94			12
13	1.07			0.66	39 S	2.24	1.02	925 S	81.5	13
14	1.06			0.65			1.20			14
15	1.05			0.65			1.34			15
16	1.04			0.63			0.71			16
17	1.00			0.63			0.62			17
18	0.98			0.63			0.58			18
19	0.98			0.65			0.64			19
20	1.38	67 S	7.99	0.61			0.60			20
21	1.11			0.60	23 S	1.21	0.57			21
22	1.37			0.58			0.57			22
23	1.21			0.62			0.56			23
24	1.30			0.67			0.55			24
25	1.31	56 S	6.34	0.61			0.55			25
26	1.02			0.64			0.55			26
27	0.94			0.62			0.54			27
28	0.91			0.58			0.54			28
29	0.87			0.56			0.54			29
30	0.84			0.54			0.54			30
31				0.55			0.52			31
TOTAL	34.749		14	20.961		10	21.719		101	

S - SAMPLE(S) COLLECTED THIS DAY

PRINCE EDWARD ISLAND

BRUDENELL RIVER AT BRUDENELL - STATION NO. 01CE004

SUSPENDED SEDIMENT FOR 1990

DAY	SEP DAILY DISCHARGE (m^3/s)	SEP MEAN CONCENTRATION (mg/L)	SEP DAILY LOAD (t)	OCT DAILY DISCHARGE (m^3/s)	OCT MEAN CONCENTRATION (mg/L)	OCT DAILY LOAD (t)	NOV DAILY DISCHARGE (m^3/s)	NOV MEAN CONCENTRATION (mg/L)	NOV DAILY LOAD (t)	DAY
1	0.51	10 S	0.448	0.57			0.94			1
2	0.57			0.58			0.87			2
3	1.07			0.63			0.88			3
4	0.61			0.62			0.92			4
5	0.56			0.61			0.94			5
6	0.55			0.57			1.01			6
7	0.54			0.55			1.06			7
8	0.66			0.53			1.19			8
9	0.56			0.54			1.17			9
10	0.52	1 S	0.045	0.61			1.15			10
11	0.53			0.58			1.29			11
12	0.51			0.54			1.20			12
13	0.51			0.54			1.15			13
14	0.50			0.54			1.13	1 S	0.293	14
15	0.49			0.54			1.11	25 S	2.40	15
16	0.52			0.52			1.12			16
17	0.51			0.51	1 S	0.044	1.11			17
18	0.50			0.51			1.39			18
19	0.49			0.67			2.27			19
20	0.68			0.61	27 S	1.43	2.03			20
21	1.24			0.54			1.48	79 S	10.1	21
22	0.98			0.53			1.40	18 S	2.18	22
23	0.77			0.54			1.37			23
24	0.82			0.59			1.41			24
25	0.63			0.68			1.46			25
26	0.58			0.61			1.45			26
27	0.56			0.74			1.32			27
28	0.55			0.67			1.35			28
29	0.53			1.26			1.32			29
30	0.55			2.98			1.29			30
31				1.13						31
TOTAL	18.435		0	21.776		1	38.793		15	

S - SAMPLE(S) COLLECTED THIS DAY

PRINCE EDWARD ISLAND

BRUDENELL RIVER AT BRUDENELL - STATION NO. 01CE004

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT DISCHARGE (m^3/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
MAR 19	14:00	3.0	2.59	1QRB	DH48	407															
MAR 22	15:00		1.45	1QRB	DH48	218															
APR 05	15:00	6.5	1.48	1QRB	DH48	15															
APR 07	13:14	5.0	1.14	1QRB	DH48	9															
APR 09	13:08	4.0	1.57	1QRB	DH48	9															
APR 11	11:20	5.0	2.07	1QRB	DH48	17															
APR 11	13:11	5.0	2.51	1QRB	DH48	37															
APR 12	15:17	7.0	1.57	1QRB	DH48	15															
APR 13	10:18	3.0	1.26	1QRB	DH48	8															
APR 15	13:54	7.0	1.20	1QRB	DH48	5															
APR 16	17:18	9.0	1.78	1QRB	DH48	9															
APR 17	17:50	8.0	1.38	1QRB	DH48	3															
APR 18	17:25	9.0	1.85	1QRB	DH48	8															
APR 19	18:04	7.0	1.38	1QRB	DH48	8															
APR 20	16:24	8.0	1.20	1QRB	DH48	13															
APR 24	16:30	5.0	1.38	1QRB	DH48	8															
APR 26	16:41	7.0	1.26	1QRB	DH48	10	114														
APR 27	16:34	10.6	1.32	1QRB	DH48	8															
APR 28	17:59	8.0	1.26	1QRB	DH48	14															
APR 30	15:10	10.1	1.32	1QRB	DH48	9															
MAY 01	15:06	10.5	1.14	1QRB	DH48	9															
MAY 02	15:10	10.8	1.08	1QRB	DH48	5															
MAY 04	15:37	10.3	1.08	1QRB	DH48	7															
MAY 05	16:44	10.7	1.08	1QRB	DH48	4															
MAY 07	16:30	10.5	1.51	1QRB	DH48	12															
MAY 08	15:11	10.6	1.20	1QRB	DH48	32															
MAY 10	18:01	10.4	1.02	1QRB	DH48	43															
MAY 11	13:50	10.5	0.958	1QRB	DH48	11															
MAY 12	08:50		1.02	1QRB	DH48	61															
MAY 14	18:25		1.26	1QRB	DH48	37															
MAY 15	15:21		1.57	1QRB	DH48	23															
MAY 16	15:24		1.38	1QRB	DH48	28															
MAY 17	15:02		1.32	1QRB	DH48	10															
MAY 19	18:47		1.32	1QRB	DH48	6															
MAY 20	13:50		1.57	1QRB	DH48	12															
MAY 22	18:15		1.26	1QRB	DH48	6															
MAY 24	16:30		1.51	1QRB	DH48	29															
MAY 25	15:14	10.4	1.32	1QRB	DH48	18															
MAY 28	19:43	9.0	1.64	1QRB	DH48	22															
MAY 29	18:34	10.5	1.14	1QRB	DH48	22															
MAY 30	18:14	10.0	1.57	1QRB	DH48	25															
JUN 20	10:30	17.0	1.56	1QRB	DH48	67															
JUN 25	19:15	20.1	1.14	1QRB	DH48	56															
JUL 06	09:58	10.5	0.806	1QRB	DH48	9															
JUL 10	13:21	20.1	0.752	1QRB	DH48	17															
JUL 11	17:54	10.6	0.700	1QRB	DH48	69															
JUL 12	18:00	10.8	0.700	1QRB	DH48	8															
JUL 13	18:00	10.8	0.649	1QRB	DH48	39															
JUL 21	18:05	20.0	0.600	1QRB	DH48	53															
AUG 03	12:43	10.7	0.860	1QRB	DH48	221															
AUG 13	19:06	21.1	0.806	1QRB	DH48	525															
SEP 01	10:01	20.1	0.505	1QRB	DH48	10															
SEP 10	13:00		0.529	1QRB	DH48	1															
OCT 17	14:30	12.0	0.505	1QRB	DH48	1															
OCT 20	17:49		0.600	1QRB	DH48	27															
NOV 14	12:45		1.13	1QRB	DH48	3															
NOV 14	15:40		1.14	1QRB	DH48	15															
NOV 15	15:52		1.14	1QRB	DH48	25															
NOV 21	16:15		1.45	1QRB	DH48	79															
NOV 22	16:13		1.38	1QRB	DH48	18															

NOTE: SINGLE VERTICAL LOCATED AT 1QLB (ONE QUARTER THE DISTANCE FROM THE LEFT BANK) FOR 1990

BRUDENELL RIVER AT BRUDENELL - STATION NO. 01CE004

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)				MINIMUM (MG/L)			SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)			TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	HISTORICAL STANDARD ERROR OF MEAN %
1979	------CCCCCC	MANUAL	488	NOV	4		1	DEC	11 *	120	DEC	17	998 *	---	---	---
1980	CCCCCCCCCCCC	MANUAL	333	APR	5		1	FEB	10	160	APR	5 *	564	1.54	1.54	---
1981	CCCCCCCCCCCC	MANUAL	336	FEB	3		1	SEP	4	89.5	FEB	12	665	1.82	1.68	9.4
1982	CCCCCCCCCCCC	MANUAL	68	APR	29		1	MAY	28	22.6	APR	29	303	0.830	1.40	21.1
1983	CCCCCCCCCCCC	MANUAL	106	MAR	20		1	NOV	5	17.7	MAR	21	349	0.957	1.29	18.3
1984	CCCCCCCCCCCC	MANUAL	277	AUG	14		1	MAR	9	106	FEB	5	507	1.38	1.31	14.1
1985	CCCCCCCCCCCC	MANUAL	939	APR	8		1	JAN	3	25.3	APR	17	267	0.731	1.21	14.7
1986	CCCCCCCCCCCC	MANUAL	383	JAN	20		1	MAR	11	85.6	MAR	31	353	1.52	1.25	12.5
1987	CCCCCCPPCCCP	MANUAL	1 350	NOV	27 *		1	JAN	2	19.5	APR	7	222	---	---	---
1988	---PCP---PCP	MANUAL	362	MAY	14		1	MAY	20	28.0	OCT	20	294	---	---	---
1989	---PPPPPPP--	MANUAL	48	APR	5		1	MAY	3	---		---	---	---	---	---
1990	--PPCPPPPPP-	MANUAL	925	AUG	13		1	SEP	10	81.5	AUG	13	349	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

BRUDENELL RIVER NEAR BRUDENELL - STATION NO. 01CE003

LOCATION: LAT 46 12 02 N LONG 062 38 58 W
DRAINAGE AREA: 36 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1966	------CCCCCC	MANUAL	31 OCT 12	2 SEP 8	2.5OCT 12	73.7	---	---	---
1967	CCCCCCCCCCCC	MANUAL	150 MAY 4	1 JUL 6	50.5MAY 4	690 *	1.86	1.86	---
1968	CCCCCCCCCCCC	MANUAL	623 MAR 16	3 AUG 18	286 MAR 18	1 410 *	3.85	2.05	34.7
1969	CCCCCCCCCCCC	MANUAL	394 MAR 26	1 MAY 19	150 MAR 26	814	2.23	2.65	23.0
1970	CCCCCCCCCCCC	MANUAL	128 APR 3	2 JAN 11	36.5MAR 28	316	0.865	2.20	28.1
1971	CCCCCCCCCCCC	MANUAL	58 MAY 24	1 DEC 26	23.5APR 21	459	1.26	2.01	25.2
1972	CCCCCCCCCCCC	MANUAL	1 010 MAR 18 *	0 FEB 6 *	311 MAR 18 *	1 270	3.56	2.27	21.7
1973	CCCCCCCCCCCC	MANUAL	126 FEB 4	2 JUN 13	27.3MAR 9	434	1.19	2.12	21.0
1974	CCCCCCCCCCCC	MANUAL	112 DEC 3	1 SEP 13	35.4MAR 5	578	1.58	2.05	19.1
1975	CCCCCCCCCCCC	MANUAL	415 APR 20	3 FEB 2	161 APR 20	981	2.69	2.12	16.6
1976	CCCCCCCCCCCC	MANUAL	194 MAR 21	0 DEC 13	93.2JAN 28	726	2.00	2.11	15.0
1977	CCCCCCCCCCCC	MANUAL	94 APR 1	1 DEC 13	70.6APR 1	545	1.49	2.05	14.2
1978	CCCCCCCCCCCC	MANUAL	80 JAN 15	1 FEB 13	49.9JAN 15	285	0.781	1.95	14.7
1979	CCCCCC------	MANUAL	175 MAR 11	2 MAR 29	43.7FEB 28	204	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

DAMES BROOK NEAR NEWTON - STATION NO. 01CB010

LOCATION: LAT 46 20 49 N LONG 063 33 19 W
DRAINAGE AREA: 16.2 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-NOV MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1974	---CCCCCCCC-	MANUAL	730 JUL 10 *	1 OCT 2	122 APR 4 *	413 *	1.69	1.69	---
1975	---CCCCCCCC-	MANUAL	312 NOV 14	0 JUL 17 *	82.6APR 20	223	0.925	1.31	29.4

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

DUNK RIVER ABOVE SCALES POND - STATION NO. 01CB011

LOCATION: LAT 46 20 55 N LONG 063 34 40 W
DRAINAGE AREA: 80.6 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1974	---PPPPPPPP-	MANUAL	336 JUL 10 *	1 MAY 8 *	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

DUNK RIVER AT MCKENNA'S BRIDGE - STATION NO. 01CB009

LOCATION: LAT 46 21 09 N LONG 063 32 32 W
DRAINAGE AREA: 53.1 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-NOV MEAN LOAD (TONNES)	SUMMARY : APR-NOV HISTORICAL MEAN LOAD (TONNES)	SUMMARY : APR-NOV STANDARD ERROR OF MEAN %
1974	---CCCCCCCC-	MANUAL	473 NOV 26 *	1 JUN 22	96.0NOV 26 *	494 *	2.03	2.03	---
1975	---CCCCCCCC-	MANUAL	129 APR 20	0 MAY 28 *	36.8MAY 6	228	0.979	1.50	34.8

MANUAL - MANUAL SAMPLING
C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

DUNK RIVER AT WALL ROAD - STATION NO. 01CB002

LOCATION: LAT 46 20 45 N LONG 063 38 03 W
DRAINAGE AREA: 114 km²
TYPE OF FLOW: REGULATED
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : MAY-NOV MEAN LOAD (TONNES)	SUMMARY : MAY-NOV HISTORICAL MEAN LOAD (TONNES)	SUMMARY : MAY-NOV STANDARD ERROR OF MEAN %
1974	---CCCCCCCC-	MANUAL	1 830 NOV 26 *	1 MAY 6 *	650 NOV 26 *	1 300 *	4.80	4.80	---
1975	----CCCCCCC-	MANUAL	393 JUL 3	3 JUN 22	70.3JUL 3	1 050	4.90	4.85	1.0

MANUAL - MANUAL SAMPLING
C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

DUNK RIVER BELOW SCALES POND - STATION NO. 01CB013

LOCATION: LAT 46 20 36 N LONG 063 36 40 W
DRAINAGE AREA: 98.6 km²
TYPE OF FLOW: REGULATED
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-NOV MEAN LOAD (TONNES)	SUMMARY : APR-NOV HISTORICAL MEAN LOAD (TONNES)	SUMMARY : APR-NOV STANDARD ERROR OF MEAN %
1974	---CCCCCCCC-	MANUAL	134 APR 5 *	1 MAY 10 *	100 APR 5 *	579 *	2.37	2.37	---

MANUAL - MANUAL SAMPLING
C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

DUNK RIVER NEAR BREADALBANE - STATION NO. 01CB008

LOCATION: LAT 46 21 06 N LONG 063 29 18 W
DRAINAGE AREA: 19.8 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-NOV MEAN LOAD (TONNES)	SUMMARY : APR-NOV HISTORICAL MEAN LOAD (TONNES)	SUMMARY : APR-NOV STANDARD ERROR OF MEAN %
1974	---CCCCCCCC-	MANUAL	525 NOV 26 *	1 JUN 20 *	116 NOV 26 *	571 *	2.34	2.34	---
1975	----CCCCCCC-	MANUAL	109 MAY 9	1 MAY 23	31.7MAY 9	97.6	---	---	---

MANUAL - MANUAL SAMPLING
C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

EAST BRANCH DUNK RIVER AT ELLIOTT - STATION NO. 01CB007

LOCATION: LAT 46 21 47 N LONG 063 27 48 W
DRAINAGE AREA: 10.7 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-NOV MEAN LOAD (TONNES)	SUMMARY : APR-NOV HISTORICAL MEAN LOAD (TONNES)	SUMMARY : APR-NOV STANDARD ERROR OF MEAN %
1974	---CCCCCCCC-	MANUAL	145 NOV 26 *	1 MAY 8 *	30.5APR 5	139 *	0.568	0.568	---
1975	---CCCCCCCC-	MANUAL	138 APR 20	1 APR 9	37.4APR 20 *	87.9	0.360	0.46	22.4

MANUAL - MANUAL SAMPLING
C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

ELMO RIVER NEAR SCALES POND - STATION NO. 01CB012

LOCATION: LAT 46 20 19 N LONG 063 35 52 W
DRAINAGE AREA: 7.9 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-NOV MEAN LOAD (TONNES)	SUMMARY : APR-NOV HISTORICAL MEAN LOAD (TONNES)	SUMMARY : APR-NOV STANDARD ERROR OF MEAN %
1974	---CCCCCCCC-	MANUAL	847 NOV 26 *	1 AUG 21	24.0NOV 26 *	62.*	0.258	0.258	---
1975	---CCCCCCCC-	MANUAL	257 NOV 14	0 JUN 26 *	8.0APR 20	38.1	0.160	0.20	23.4

MANUAL - MANUAL SAMPLING
C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

EMERALD BROOK NEAR EMERALD - STATION NO. 01CB006

LOCATION: LAT 46 21 34 N LONG 063 33 29 W
DRAINAGE AREA: 5.59 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	SUMMARY : JAN-DEC HISTORICAL MEAN LOAD (TONNES)	SUMMARY : JAN-DEC STANDARD ERROR OF MEAN %
1974	------PCCCCC		15 SEP 29	1 JUL 24	0.0NOV 26	1.80	---	---	---
1975	CCCCCCCCCCCC		31 APR 20	0 AUG 27 *	1.8APR 20	18.3	0.052	0.052	---
1976	CCCCCCCCCCCC		130 FEB 22	2 FEB 4	28.2FEB 22	87.1	0.238	0.14	64.0
1977	CCCCCCCCCCCC	MANUAL	137 MAR 31	0 SEP 5	34.8MAR 31	102	0.283	0.19	37.0
1978	CCCCCCCCCCCC	MANUAL	110 JAN 15	1 FEB 25	26.9JAN 15	71.2	0.195	0.19	26.0
1979	CCCCCCCCCCCC	MANUAL	385 DEC 17	0 SEP 20	77.9FEB 27	334	0.919	0.33	44.5
1980	CCCCCCCCCCCC	MANUAL	159 MAR 18	1 SEP 17	24.7MAR 18	61.7	0.169	0.30	40.7
1981	CCCCCCCCCCCC	MANUAL	1 110 FEB 12 *	1 MAY 30	238 FEB 12 *	457 *	1.25	0.44	38.7

MANUAL - MANUAL SAMPLING
C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

PRINCE EDWARD ISLAND

NORTH BROOK NEAR WALL ROAD - STATION NO. 01CB003

LOCATION: LAT 46 20 49 N LONG 063 37 58 W
DRAINAGE AREA: 12.9 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING		SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	SUMMARY : JAN-DEC HISTORICAL MEAN LOAD (TONNES)	SUMMARY : JAN-DEC STANDARD ERROR OF MEAN %
1971	------PCCCCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	---	---	---
1972	CCCCCCCCCCCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1973	CCCCCCCCCCCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1974	CCCCCCCCCCCC		1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1975	CCCCCCCCCCCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1976	CCCCCCCCCCCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1977	CCCCCCCCCCCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1978	CCCCCCCCCCCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1979	CCCCCCCCCCCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1980	CCCCCCCCCCCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1981	CCCCCCCCCCCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1982	CCCCCCCCCCCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1983	CCCCCCCCCCCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1984	CCCCCCCCCCCC	MANUAL	3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1985	CCCCCCCCCCCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1986	CCCCCCCCCCCC	MANUAL	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1987	PPPCCCPCCCCP	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

SHELT CREEK NEAR ELLERSLIE - STATION NO. 01CA004

LOCATION: LAT 46 36 06 N LONG 063 56 14 W
DRAINAGE AREA: 17.3 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING		SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN LOAD (TONNES)	SUMMARY : JAN-DEC HISTORICAL MEAN LOAD (TONNES)	SUMMARY : JAN-DEC STANDARD ERROR OF MEAN %
1967	---------PCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	---	---	---
1968	CCCCCCCCCCCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1969	CCCCCCCCCCCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1970	CCCCCCCCCCCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1971	CCCCCCCCCCCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1972	CCCCCCCCCCCC	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1973	-PPPP-PP-P--	MANUAL	1	[illegible]	[illegible]	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

SOUTHWEST BROOK NEAR MIDDLETON - STATION NO. 01CB014

LOCATION: LAT 46 20 05 N LONG 063 38 03 W
DRAINAGE AREA: 23.4 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE:

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING		SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	SUSPENDED SEDIMENT LOAD TOTAL FOR PERIOD (TONNES)	SUMMARY : APR-NOV MEAN LOAD (TONNES)	SUMMARY : APR-NOV HISTORICAL MEAN LOAD (TONNES)	SUMMARY : APR-NOV STANDARD ERROR OF MEAN %
1974	---CCCCCCCC-	MANUAL	5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1975	---CCCCCCCC-	MANUAL		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH * - EXTREME FOR PERIOD OF RECORD

PRINCE EDWARD ISLAND

WILMOT RIVER NEAR WILMOT VALLEY - STATION NO. 01CB004

SUSPENDED SEDIMENT FOR 1990

LOCATION: LAT. 46 23 35 N LONG 063 39 35 W
DRAINAGE AREA: [illegible] km²
TYPE OF FLOW: [illegible]
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 535 TONNES FOR THE PERIOD APR 02 TO DEC 13

DAY	APR DAILY DISCHARGE (m³/s)	APR MEAN CONCENTRATION (mg/L)	APR DAILY LOAD (t)	MAY DAILY DISCHARGE (m³/s)	MAY MEAN CONCENTRATION (mg/L)	MAY DAILY LOAD (t)	JUN DAILY DISCHARGE (m³/s)	JUN MEAN CONCENTRATION (mg/L)	JUN DAILY LOAD (t)	DAY
1	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]			1
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			2
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			3
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			4
5	[illegible]	[illegible]	[illegible]	[illegible]	13 S	[illegible]	[illegible]			5
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			6
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			7
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			8
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			9
10	[illegible]	26 S	[illegible]	[illegible]	[illegible]	0.720	[illegible]			10
11	4.72	271 S	111	1.20	6 S	0.622	[illegible]			11
12	[illegible]	70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			12
13	[illegible]	22 S	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			13
14	[illegible]	14 S	[illegible]	[illegible]	320 S	[illegible]	[illegible]			14
15	1.88	10	1.62	1.60	140 S	[illegible]	1.32			15
16	3.57	204 S	62.9	1.55	13 S	1.74	1.28			16
17	[illegible]	51 S	9.78	[illegible]	8	[illegible]	[illegible]			17
18	2.37	40 S	8.19	[illegible]	8	[illegible]	[illegible]			18
19	2.04	22	3.88	1.56	9	1.21	[illegible]			19
20	1.95	15 S	2.53	1.51	6	0.783	1.20			20
21	2.00	18	3.11	1.53	8	1.06	1.13			21
22	1.95	14 S	2.36	1.50	9 S	1.17	1.40			22
23	1.84	10 S	1.59	2.57	46 S	10.2	1.17	117 S	11.8	23
24	1.75	10	1.51	2.03			1.26			24
25	1.68	9 S	1.31	1.81			1.41			25
26	1.64	9 S	1.28	1.76			1.09			26
27	1.59	8 S	1.10	1.74	7 S	1.05	1.02			27
28	1.52	8	1.05	1.70			0.99			28
29	1.45	8	1.00	1.63			0.95			29
30	1.41	9	1.10	4.37			0.94			30
31				3.24						31
TOTAL	62.05		341	53.19		141	43.192		12	

DAY	JUL DAILY DISCHARGE (m³/s)	JUL MEAN CONCENTRATION (mg/L)	JUL DAILY LOAD (t)	AUG DAILY DISCHARGE (m³/s)	AUG MEAN CONCENTRATION (mg/L)	AUG DAILY LOAD (t)	SEP DAILY DISCHARGE (m³/s)	SEP MEAN CONCENTRATION (mg/L)	SEP DAILY LOAD (t)	DAY
1	[illegible]			[illegible]			[illegible]			1
2	[illegible]			[illegible]			[illegible]			2
3	[illegible]			[illegible]			[illegible]			3
4	[illegible]			[illegible]			[illegible]			4
5	[illegible]			[illegible]			[illegible]			5
6	[illegible]			[illegible]			[illegible]			6
7	[illegible]			[illegible]			[illegible]			7
8	[illegible]			[illegible]			[illegible]			8
9	[illegible]			[illegible]			[illegible]			9
10	[illegible]			[illegible]			[illegible]			10
11	[illegible]			[illegible]			[illegible]			11
12	[illegible]			[illegible]			[illegible]			12
13	[illegible]	4 S	0.260	[illegible]			[illegible]			13
14	[illegible]			[illegible]			[illegible]			14
15	[illegible]			0.73			[illegible]			15
16	[illegible]			[illegible]			[illegible]			16
17	[illegible]			[illegible]			[illegible]			17
18	[illegible]			[illegible]			[illegible]			18
19	[illegible]			[illegible]			[illegible]			19
20	[illegible]			0.67			0.53A			20
21	[illegible]			[illegible]			[illegible]			21
22	[illegible]			[illegible]			[illegible]			22
23	0.67			[illegible]			[illegible]			23
24	0.76			[illegible]	4 S	0.223	[illegible]			24
25	0.72			0.64			0.56A			25
26	[illegible]			[illegible]			0.50			26
27	[illegible]			[illegible]			[illegible]	2 S	0.084	27
28	[illegible]			[illegible]			[illegible]			28
29	[illegible]			[illegible]			[illegible]			29
30	0.65			0.61			0.48			30
31	0.64			0.60						31
TOTAL	23.285		0	23.18		0	16.738		0	

A - MANUAL GAUGE E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

PRINCE EDWARD ISLAND

WILMOT RIVER NEAR WILMOT VALLEY - STATION NO. 01CB004

SUSPENDED SEDIMENT FOR 1990

DAY	OCT DISCHARGE (m³/s)	OCT MEAN CONCENTRATION (mg/L)	OCT LOAD (t)	NO DISCHARGE (m³/s)	NO MEAN CONCENTRATION (mg/L)	NO LOAD (t)	DEC DISCHARGE (m³/s)	DEC MEAN CONCENTRATION (mg/L)	DEC LOAD (t)	DAY
1	[illegible]			[illegible]			[illegible]			1
2	[illegible]			[illegible]	5 S	0.278	[illegible]			2
3	[illegible]			[illegible]	7 S	0.478	[illegible]			3
4	[illegible]			[illegible]	8 S	0.837	[illegible]			4
5	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]			5
6	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]			6
7	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]			7
8	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]			8
9	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]			9
10	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]			10
11	[illegible]	4 S	0.241	[illegible]	[illegible]	[illegible]	[illegible]			11
12	[illegible]		0.181	[illegible]	30 S	2.30	[illegible]	4 S	0.869	12
13	[illegible]			[illegible]	6 S	0.432	[illegible]			13
14	[illegible]			[illegible]			[illegible]			14
15	[illegible]	2 S	0.479	[illegible]			[illegible]			15
16	[illegible]	2 S	0.085	[illegible]			[illegible]			16
17	[illegible]			[illegible]			[illegible]			17
18	[illegible]	21 S	0.925	[illegible]	127 S	25.1	[illegible]			18
19	[illegible]			[illegible]	16 S	3.16	[illegible]			19
20	[illegible]			[illegible]			[illegible]			20
21	0.51			[illegible]			[illegible]			21
22	0.50			[illegible]	11 S	1.33	[illegible]			22
23	0.49			[illegible]			[illegible]			23
24	0.48	9 S	0.378	[illegible]			[illegible]			24
25	0.47			[illegible]			10.5 A			25
26	0.46	6 S	0.241	[illegible]			[illegible]			26
27	0.59			[illegible]			[illegible]			27
28	0.54			[illegible]			[illegible]			28
29	0.73			[illegible]			[illegible]			29
30	1.50			[illegible]	4 S	0.397	[illegible]			30
31	0.81			1.09			[illegible]			31
TOTAL	16.998		2	32.387		39	93.53		1	

A - MANUAL GAUGE

S - SAMPLE(S) COLLECTED THIS DAY

WILMOT RIVER NEAR WILMOT VALLEY - STATION NO. 01CB004
INSTANTANEOUS SUSPENDED SEDIMENT FOR 1990

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT. CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES .002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	PERCENT SAND	SILT	CLAY
[illegible]	[illegible]	[illegible]	[illegible]	1QRB	DH48	[illegible]	147														
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	163														
MAY 23	11:45	[illegible]	[illegible]	1QRB	DH48	67	119														
MAY 27	16:27	[illegible]	[illegible]	1QRB	DH48	7															
JUN 23	11:45	[illegible]	[illegible]	1QRB	DH48	117															
JUL 13	09:00	12.0	0.756	1QRB	DH48	4															
AUG 24	10:00	14.5	0.656	1QRB	DH48	4															
SEP 27	12:00	[illegible]	0.552	1QRB	DH48	2															
OCT 11	09:45	[illegible]	0.498	1QRB	DH48	[illegible]															
OCT 12	16:50	10.0	0.512	1QRB	DH48	4															
OCT 16	18:45	10.3	0.499	1QRB	DH48	9															
OCT 17	16:43	10.0	0.473	1QRB	DH48	2															
OCT 19	16:55	11.5	0.541	1QRB	DH48	2	166														
OCT 24	16:15	10.0	0.486	1QRB	DH48	6															
OCT 26	16:30	8.0	0.464	1QRB	DH48	6															
NOV 02	15:50	4.0	0.642	1QRB	DH48	5															
NOV 05	11:30	[illegible]	0.633	1QRB	DH48	7															
NOV 06	15:55	[illegible]	0.642	1QRB	DH48	8															
NOV 08	08:20	3.0	1.10	1QRB	DH48	40															
NOV 09	09:50	2.5	0.924	1QRB	DH48	13															
NOV 10	14:30	5.0	0.881	1QRB	DH48	17															
NOV 13	13:25	[illegible]	0.895	1QRB	DH48	30															
NOV 13	16:00	1.0	0.876	1QRB	DH48	15															
NOV 15	15:46	[illegible]	0.828	1QRB	DH48	[illegible]															
NOV 19	16:20	4.0	2.67	1QRB	DH48	127															
NOV 20	16:07	[illegible]	1.62	1QRB	DH48	15															
NOV 21	16:20	[illegible]	[illegible]	1QRB	DH48	11															
NOV [illegible]	16:15	[illegible]	[illegible]	1QRB	DH48	[illegible]															
DEC 13	11:30	2.0	1.66	1QRB	DH48	4															

NOTE: SINGLE VERTICAL LOCATED AT 1QRB (ONE QUARTER THE DISTANCE FROM THE RIGHT BANK) FOR 1990

WILMOT RIVER NEAR WILMOT VALLEY - STATION NO. 01CB004
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION MAXIMUM (MG/L)	SAMPLED CONCENTRATION MINIMUM (MG/L)	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY (TONNES)	TOTAL FOR PERIOD (TONNES)	SUMMARY : JAN-DEC MEAN YEAR (TONNES)	HISTORICAL MEAN YEAR (TONNES)	STANDARD ERROR OF MEAN %
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1989	[illegible]	MANUAL	330 APR 6	1 MAY 6	94.3 APR 6	420	---	---	---
1990	---PPPPPPPPP	MANUAL	593 APR 11	1 OCT 11	--- ---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

NAME	STATION NO.	PAGE
NEWFOUNDLAND		
CHURCHILL RIVER ABOVE UPPER MUSKRAT FALLS	03OE001	1
HARRYS RIVER BELOW HIGHWAY BRIDGE	02YJ001	2
HIGHLANDS RIVER AT TRANS-CANADA HIGHWAY	02ZA002	5
NORTHEAST BROOK NEAR ROBDICKTON	02YD002	6
NORTHEAST POND RIVER AT NORTHEAST POND	02ZM006	8
WATERFORD RIVER AT KILBRIDE	02ZM008	9
NEW BRUNSWICK		
BARNABY RIVER BELOW SEMIWAGAN RIVER	01BC003	11
BECAGUIMEC STREAM AT COLDSTREAM	01AJ010	11
BLACK BROOK NEAR ST-ANDRE-DE-MADAWASKA	01AF006	12
COAL BRANCH RIVER AT BEERSVILLE	01BS001	13
DENNIS STREAM NEAR ST. STEPHEN	01AR006	17
GRANDE RIVIERE AT VIOLETTE BRIDGE	01AF007	21
HOLMES BROOK AT MOOSE MOUNTAIN	01AJ006	22
HOLMES BROOK NEAR HOLMESVILLE	01AJ007	22
KENNEBECASIS RIVER AT APOHAQUI	01AP004	23
LITTLE SOUTHWEST MIRAMICHI RIVER AT LYTTLETON	01BP001	23
MIDDLE BRANCH NASHWAAKSIS STREAM NEAR ROYAL ROAD	01AK005	23
NARROWS MOUNTAIN BROOK NEAR NARROWS MOUNTAIN	01AL004	24
NASHWAAK RIVER AT DUNHAM BRIDGE	01AL002	25
NORTHWEST MIRAMICHI RIVER AT TROUT BROOK	01BQ001	27
PALMERS CREEK NEAR DORCHESTER	01BU004	27
PETITCODIAC RIVER NEAR PETITCODIAC	01BU002	27
RENOUS RIVER AT MCGRAW BROOK	01BC002	28
SAINT JOHN RIVER BELOW MACTAQUAC	01AK004	28
SOUTHWEST MIRAMICHI RIVER AT BLACKVILLE	01BC001	29
NOVA SCOTIA		
ANNAPOLIS RIVER AT WILMOT	01DC005	31
APRIL BROOK AT GILLISDALE	01FB005	31
FRASER BROOK NEAR ARCHIBALD	01DH003	32
KELLEY RIVER (MILL CREEK) AT EIGHT MILE FORD	01DL001	32
LITTLE SACKVILLE RIVER AT MIDDLE SACKVILLE	01EJ004	32
MIDDLE RIVER OF PICTOU AT ROCKLIN	01DP004	33
NORTH RIVER AT NORTH RIVER	01DH004	33
PEMBROKE RIVER AT GLENBERVIE	01DG018	34
SACKVILLE RIVER AT BEDFORD	01EJ001	35
SALMON RIVER AT MURRAY	01DH002	36
SALMON RIVER AT SALMON RIVER BRIDGE	01FJ001	36
SHARPE BROOK AT LLOYDS	01DD004	37
PRINCE EDWARD ISLAND		
BRUDENELL RIVER AT BRUDENELL	01CE004	38
BRUDENELL RIVER NEAR BRUDENELL	01CE003	41
DAMES BROOK NEAR NEWTON	01CB010	41
DUNK RIVER ABOVE SCALES POND	01CB011	41
DUNK RIVER AT MCKENNA'S BRIDGE	01CB009	42
DUNK RIVER AT WALL ROAD	01CB002	42
DUNK RIVER BELOW SCALES POND	01CB013	42
DUNK RIVER NEAR BREADALBANE	01CB008	42
EAST BRANCH DUNK RIVER AT ELLIOTT	01CB007	43
ELMO RIVER NEAR SCALES POND	01CB012	43
EMERALD BROOK NEAR EMERALD	01CB006	43
NORTH BROOK NEAR WALL ROAD	01CB005	44
SMELT CREEK NEAR ELLERSLIE	01CA004	44
SOUTHWEST BROOK NEAR MIDDLETON	01CB014	44
WILMOT RIVER NEAR WILMOT VALLEY	01CB004	45

STATION NO.	NAME	PAGE
	NEWFOUNDLAND	
02YD002	NORTHEAST BROOK NEAR RODDICKTON	6
02YJ001	HARVEY RIVER BELOW HIGHWAY BRIDGE	8
02ZA002	HIGHLANDS RIVER AT TRANS-CANADA HIGHWAY	8
02ZM006	NORTHEAST POND RIVER AT NORTHEAST POND	9
02ZM008	WATERFORD RIVER AT KILBRIDE	9
03OE001	CHURCHILL RIVER ABOVE UPPER MUSKRAT FALLS	1
	NEW BRUNSWICK	
01AF006	BLACK BROOK NEAR ST-AMORE-DE-MADAWASKA	12
01AF007	GRANDE RIVIERE AT VIOLETTE BRIDGE	21
01AJ006	HOLMES BROOK AT MOOSE MOUNTAIN	22
01AJ007	HOLMES BROOK NEAR HOLMESVILLE	22
01AJ010	MACAGUADIC STREAM AT COLDSTREAM	11
01AK004	SAINT JOHN RIVER BELOW MACTAQUAC	28
01AK005	MIDDLE BRANCH MAGAGUADAVIS STREAM NEAR ROYAL ROAD	23
01AL002	MAGAWAK RIVER AT DURHAM BRIDGE	25
01AL004	NARROWS MOUNTAIN BROOK NEAR NARROWS MOUNTAIN	24
01AP004	KENNEBECASIS RIVER AT APOHAQUI	23
01AR006	DENNIS STREAM NEAR ST. STEPHEN	17
01BO001	SOUTHWEST MIRAMICHI RIVER AT BLACKVILLE	29
01BO002	RENOUS RIVER AT MCGRAW BROOK	28
01BO003	BARNABY RIVER BELOW SEMIWAGAN RIVER	11
01BP001	LITTLE SOUTHWEST MIRAMICHI RIVER AT LYTTLETON	25
01BQ001	NORTHWEST MIRAMICHI RIVER AT TROUT BROOK	27
01BS001	COAL BRANCH RIVER AT BEERSVILLE	13
01BU002	PETITCODIAC RIVER NEAR PETITCODIAC	27
01BU004	PALMERS CREEK NEAR DORCHESTER	27
	NOVA SCOTIA	
01DC005	ANNAPOLIS RIVER AT WILMOT	31
01DD004	SHARPE BROOK AT LLOYDS	37
01DG010	PEMBROKE RIVER AT GLENDERVIE	34
01DH002	SALMON RIVER AT MURRAY	36
01DH003	FRASER BROOK NEAR ARCHIBALD	32
01DH004	NORTH RIVER AT NORTH RIVER	32
01DL001	KELLEY RIVER (MILL CREEK) AT EIGHT MILE FORD	33
01DP004	MIDDLE RIVER OF PICTOU AT ROCKLIN	35
01EJ001	SACKVILLE RIVER AT BEDFORD	35
01EJ004	LITTLE SACKVILLE RIVER AT MIDDLE SACKVILLE	32
01FB005	APRIL BROOK AT GILLISDALE	31
01FJ001	SALMON RIVER AT SALMON RIVER BRIDGE	36
	PRINCE EDWARD ISLAND	
01CA004	SHELT CREEK NEAR ELLERSLIE	44
01CB002	DUNK RIVER AT WALL ROAD	42
01CB004	WILMOT RIVER NEAR WILMOT VALLEY	45
01CB005	NORTH BROOK NEAR WALL ROAD	44
01CB006	EMERALD BROOK NEAR EMERALD	43
01CB007	EAST BRANCH DUNK RIVER AT ELLIOTT	43
01CB008	DUNK RIVER NEAR BREADALBANE	42
01CB009	DUNK RIVER AT MCKENNA'S BRIDGE	42
01CB010	DAMES BROOK NEAR NEWTON	41
01CB011	DUNK RIVER ABOVE SCALES POND	41
01CB012	ELMO RIVER NEAR SCALES POND	43
01CB013	DUNK RIVER BELOW SCALES POND	42
01CB014	SOUTHWEST BROOK NEAR MIDDLETON	44
01CE003	BRUDENELL RIVER NEAR BRUDENELL	41
01CE004	BRUDENELL RIVER AT BRUDENELL	38